Quantum PLUS – Installation and User manual

User and programming manual for Vista's Quantum Plus range of DVR.

Including:

QPLUS04-XXX
QPLUS08-XXX
QPLUS16-XXX

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CE INFORMATION

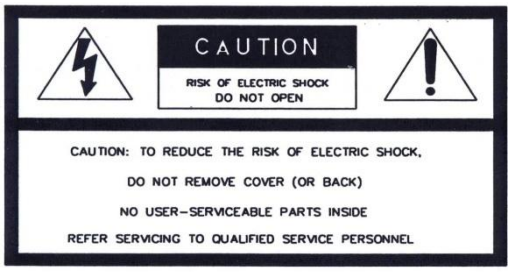
The product must be installed according to the currently valid installation regulations for EMC to guarantee the designed use and to prevent EMC problems.

The device supplied with this manual is according to the EC, EMC Directive, 89/336/EEC & LVD 73/23/EEC

Standard used for showing compliance with the essential requirements of the device:
EN 55022
EN 61000-3-2
EN 61000-3-3
EN 50130-4
EN 55024
LVD: EN60950-1

ELECTRICAL SAFETY

Explanation of electrical safety symbols


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK)
NO USER-SERVICEABLE PARTS INSIDE
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

The lighting flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance(servicing) instructions in the literature accompanying the appliance.

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SAFETY PRECAUTIONS

CAUTION BEFORE USE

Please read this manual before installing or using the Vista Quantum DVR.

Please keep this manual in a safe place, to allow for future reference

For the safety and proper use, The DVR is marked with various symbols. Please read these to prevent injury of financial loss.

INSTALLATION SITE

Ensure installation position is level, secure and adequately ventilated.

Avoid installing close to sources of humidity or water.

CONTENTS OF PACKAGING

User Manual

Power Cable

Remote Controller

Battery

Installation CD

FEATURES

● Convenience

- User-friendly GUI (Graphical User Interface)
- Easy-to-use menu structure
- Easy-to-use recorded data search (Time, Date, Motion, and Alarm)
- Easy-to control via Front Panel, IR remote control and USB 2.0 mouse.

● Stability

- Auto restart after power interruption
- DB structure offers data stabilisation and better storage utilisation

● Expandability

- Remote DVR's can be controlled using the supplied software client viewer.

● Technology

-Embedded LINUX OS

-Maximum record rate 400 fps

-High-resolution & high-quality MPEG-4 algorithm

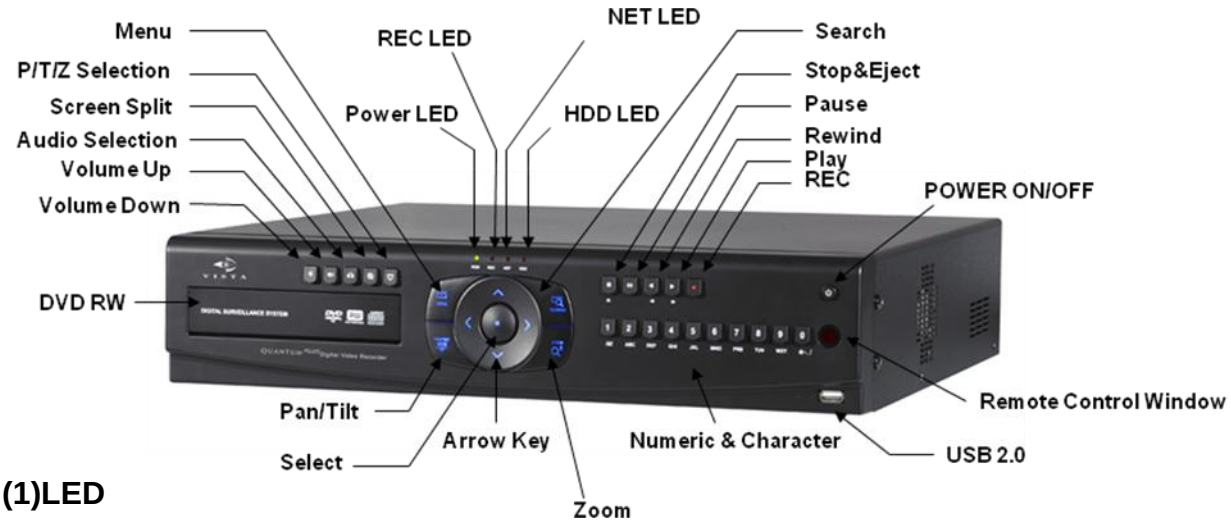
-Uses watermarking & scrambling technologies,

-MPEG-4 : 1 ~ 2 Kbytes per image with resolution 360x240

● Functionality

- Variable recording function (normal, alarm, motion, schedule, audio, Time Lapse,)
- Full channel real-time monitoring
- Live monitoring, recording, playback, backup, remote access simultaneously
- Multi channel playback
- Variable events notification to e-mail, buzzer or PC Client system

FRONT PANEL



(1)LED

- REC: Recording status (When recording is on, the red light will flash)
- POWER: System Power On/Off (When power is on, the green light will be illuminated)
- NET: Network status (When network is connected, the light will lash)
- HDD: HDD status (When the system is reading or writing to the HDD, the light will flash)

(2) USB 2.0 PORT

- USB2.0 connector, for downloading to USB pens / drives (plus upgrading firmware)

(3) POWER BUTTON

- System Power On/Off

(4) NUMERIC & CHARACTER

- Input for numbers & letters within the setup menus and searches

(5) MENU

- Displays the menu on the screen

(6) SEARCH

- Entering search mode

(7) PLAY ▶(▶)

- Playback of the recorded data
- When in play mode press again to enter fast forward mode.

(8) REWIND (◀)◀

- Reverse play of recorded data
- When in play mode press again to enter fast rewind mode.

(9) PAUSE (❚❚)

- To freeze picture on playback mode and live mode.

(10) STOP / EJECT (■)

- To stop playback and go back to live mode.
- To eject DVD-RW

(11) REC (●)

- It starts & stop manual recording, password protected.

(12) VOLUME UP & DOWN (🔊 🔉)

- To increase or decrease the volume.

(13) ARROW KEY

- Moves the cursor while in menu mode

(14) SELECT

- Menu selection

(15) PTZ Selection

- PTZ Channel selection

(16) Screen Split

- Selection of multi screen functions

(17) AUDIO Selection

- Switches between audio channels

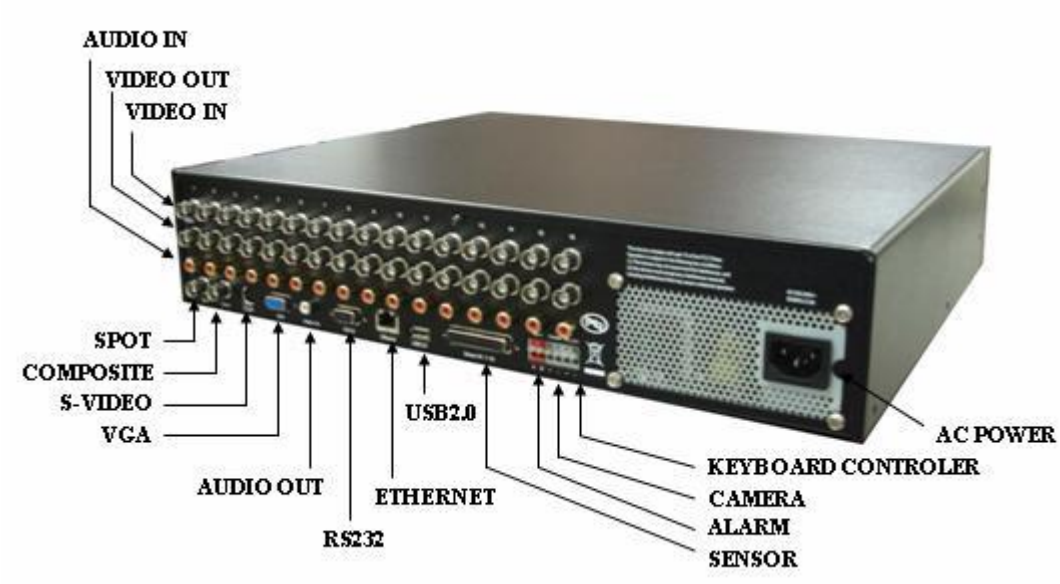
(18) PAN / TILT

- To control P/T/Z, press this button to browse virtual key on screen.

(19) ZOOM

- ZOOM P/T/Z camera in and out

REAR PANEL CONNECTIONS



(1) VIDEO IN (BNC)

- 16/8/4 Camera input (1.0v p-p, 75Ω)

(2) VIDEO OUT

- 16/8/4 LOOP / SPOT / Composite / S-VIDEO / VGA

(3) LINE AUDIO INPUT

- 16/8/4 Audio input through line

(4) AUDIO OUTPUT

- 1 Audio output

(5) RS232

- 1 Serial Communication

(6) Network Port (RJ-45)

- Connecting to the Quantum DVR through Internet or LAN

(7) USB 2.0

-USB 2.0 connector for mouse control.

(8) ALARM / SENSOR

- ALARM / 16/8/4 SENSOR INPUT / 1 OUTPUT PORT

(9) CAMERA / KEYBOARD CONTROLLER

- 1 Serial Communication for Pan / Tilt Camera
- 1 Serial Communication for P/T/Z Control Keyboard

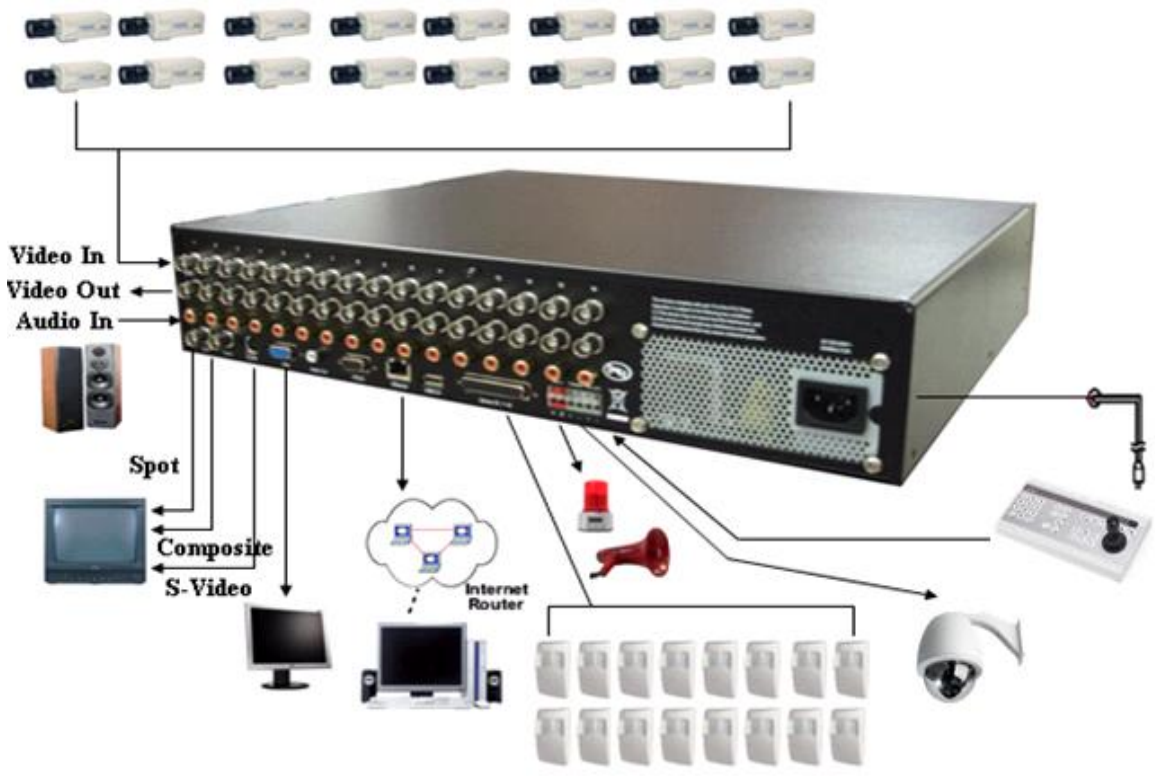
(10) AC POWER

- AC 110~240 V

ATTENTION

When the video format is changed, the system should be re-booted

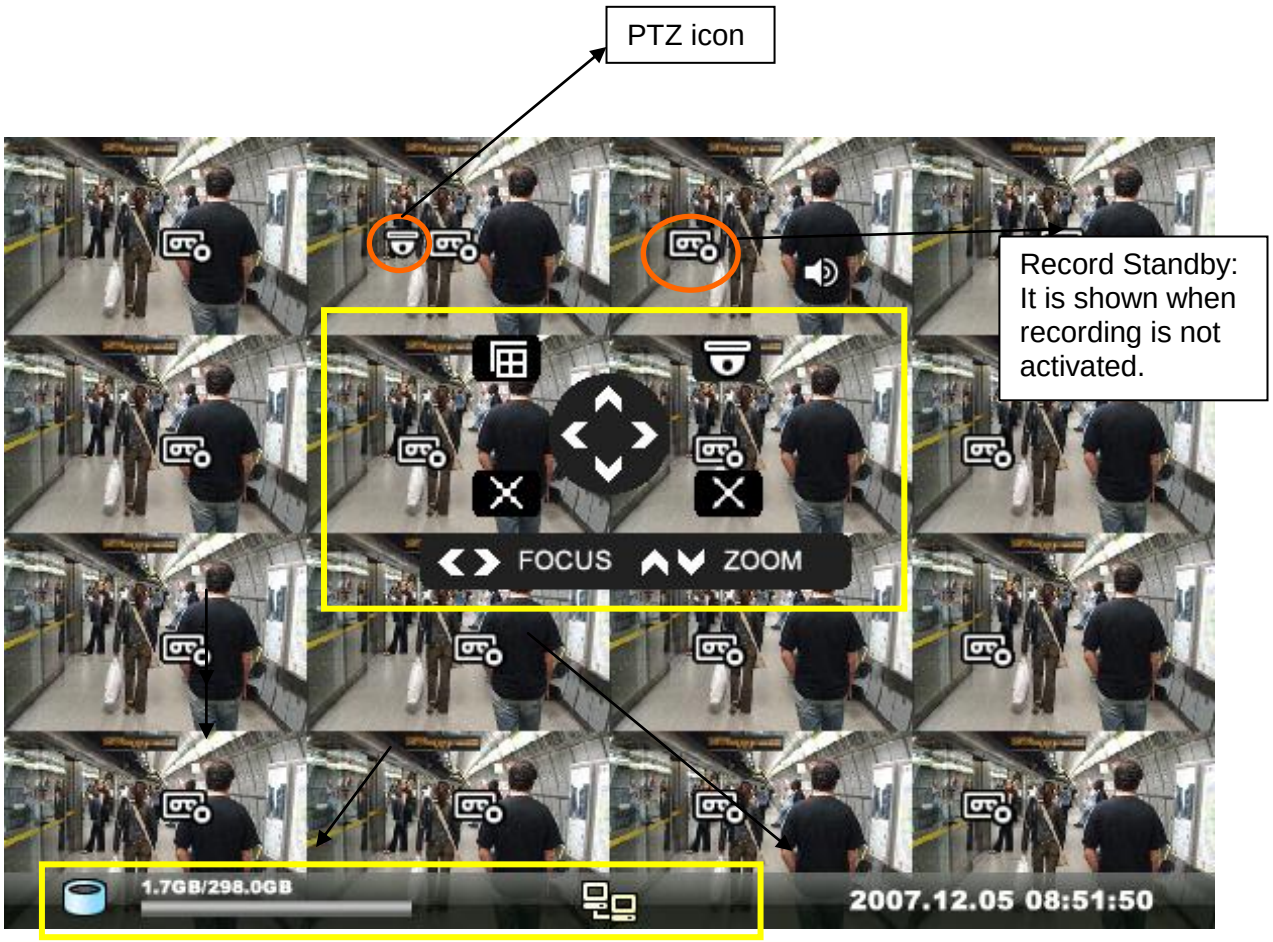
SYSTEM CONNECTION DIAGRAM



REMOTE CONTROL

1. Power: Power ON/OFF
2. REC: Start & Stop Recording
3. (1 to 9) Numbers and letters
4. P/T/Z: Entering PTZ menu directly
5. OSD: On Screen Display ON/OFF
6. SEQ: Sequence operation
7. LOG: Direct access Log list
8. INFO: Direct access system Info.
9. ID: Reserved.
10. MUTE: Audio Mute
11. AUDIO: Switches through Audio channels
12. MENU: Entering system menu
13. SEARCH: Entering search
14. ARROW & SPLIT: Left, Right, Up and Down. Also, Screen split options
15. VOL"+,-" : Up, down volume
16. CH "+,-" : Up, down channel(s)
17. ▸(▸) : Play(or fast forward)
18. ◂◂: Reverse play
19 II: Pause
20. ■: Stop playback
21. Cam: Changing PTZ icon
22. P/T: Pan &Tilt
23. Z/F: Zoom/ & Focus
24. DIS: Channel Division

OSD DESCRIPTION



The Status Bar shows HDD capacity, Network connection, Time, etc using by icons.

-HDD capacity : 1.7GB is used out of 298.0GB

-Network connection : It is shown that admin or user is connected.

-Date/Time

*Others :

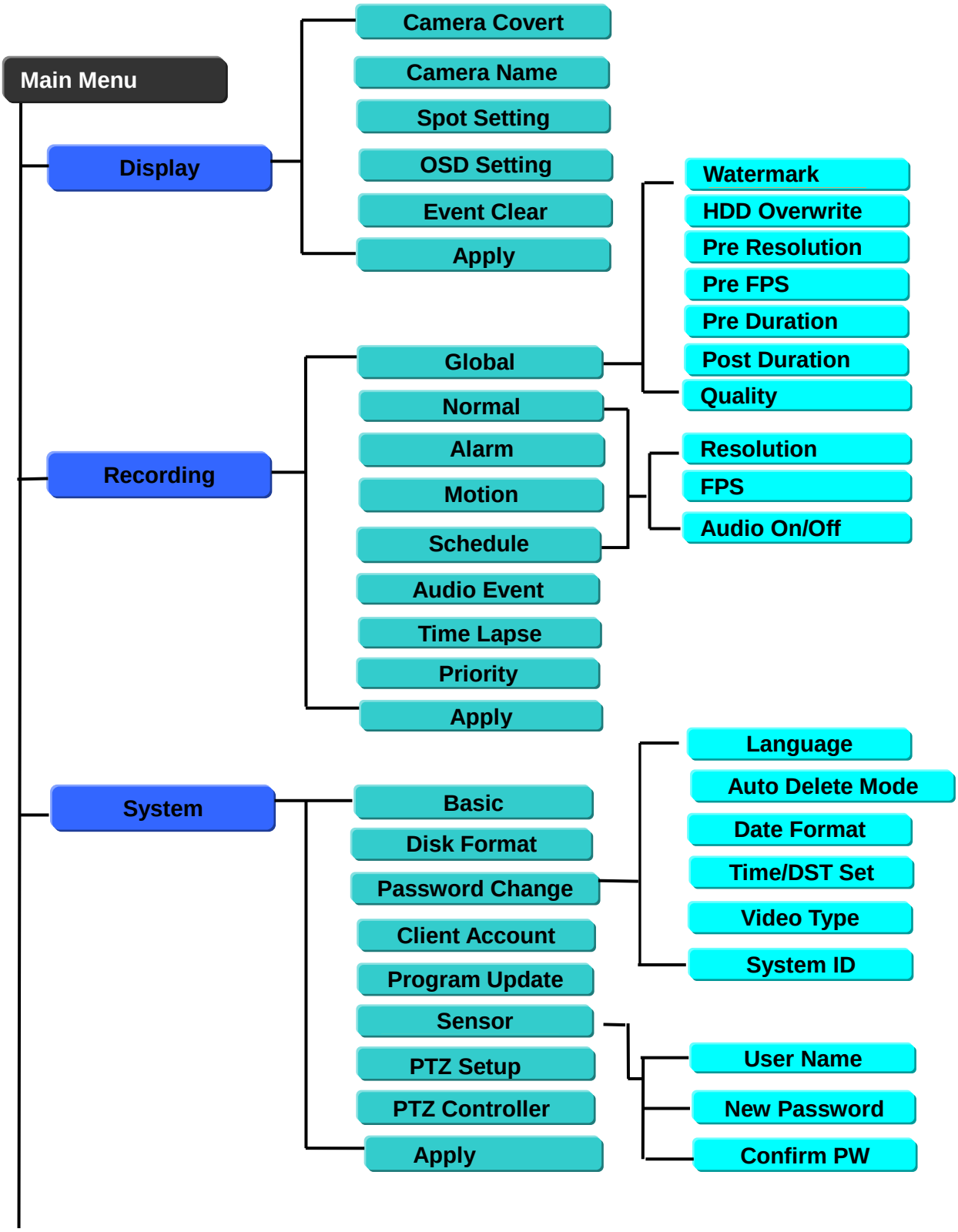
-Backup

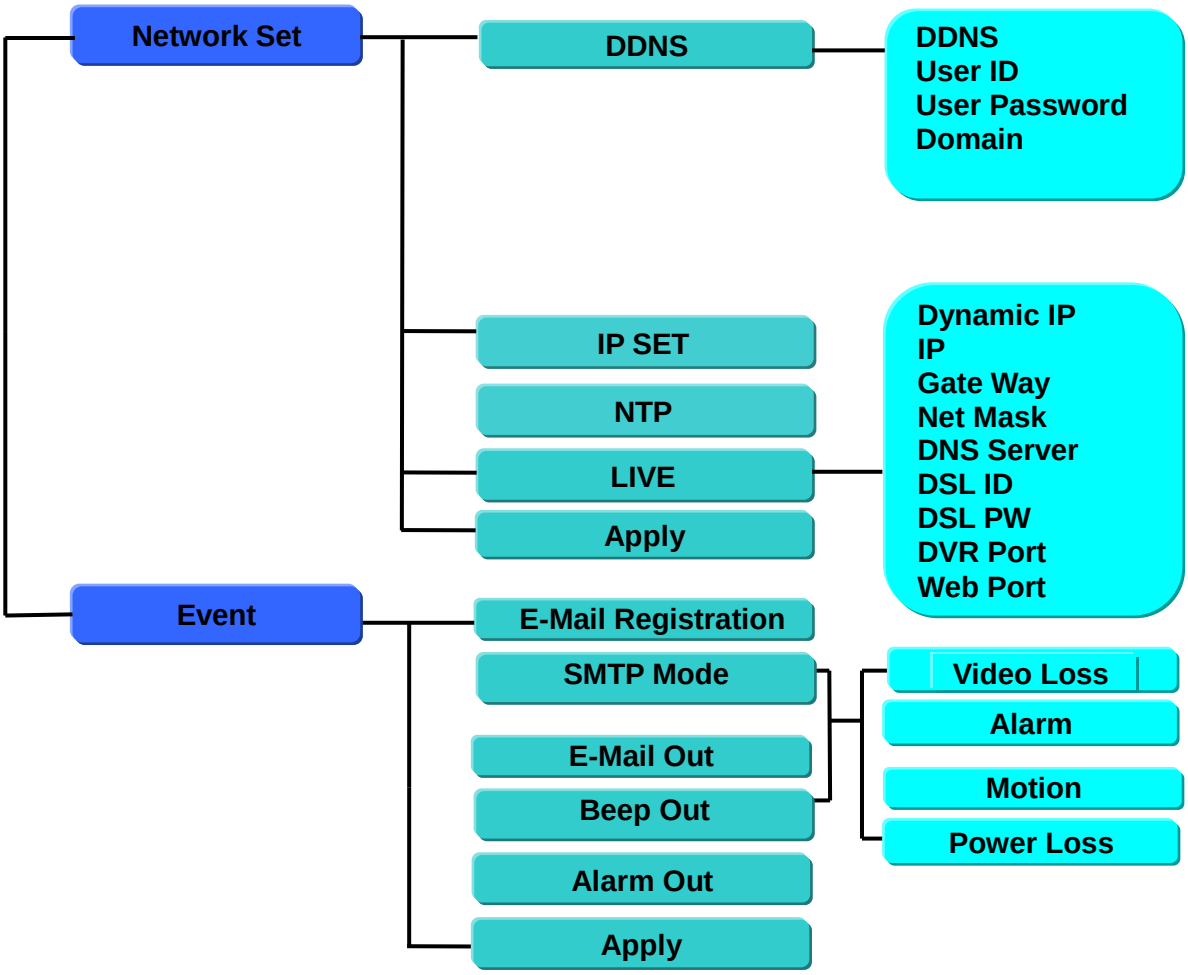
-Mute

-USB Stick:

This screen shows PTZ control of camera 2. The on screen arrows will allow control of this camera.

MENU TREE


Main Menu
Display
Camera Covert
Camera Name
Spot Setting
OSD Setting
Event Clear
Apply
Recording
Global
Normal
Alarm
Motion
Schedule
Audio Event
Time Lapse
Priority
Apply
Watermark
HDD Overwrite
Pre Resolution
Pre FPS
Pre Duration
Post Duration
Quality
Resolution
FPS
Audio On/Off
System
Basic
Disk Format
Password Change
Client Account
Program Update
Sensor
PTZ Setup
PTZ Controller
Apply
Language
Auto Delete Mode
Date Format
Time/DST Set
Video Type
System ID
User Name
New Password
Confirm PW


Network Set
DDNS
DDNS
User ID
User Password
Domain
IP SET
NTP
LIVE
Apply
Dynamic IP
IP
Gate Way
Net Mask
DNS Server
DSL ID
DSL PW
DVR Port
Web Port
Event
E-Mail Registration
SMTP Mode
E-Mail Out
Beep Out
Alarm Out
Apply
Video Loss
Alarm
Motion
Power Loss

DEFAULT PASSWORDS

Front Panel

A Password is required if you need to: enter the menus; down power; stop recording or changing an IP setting.

A prompt will be displayed asking for password.

The default Password is: **00000000** (8 zeros)

Viewer Software

When using the supplied Viewer software, the following password will be required.

User ID is "***admin***" (not case sensitive).

Password is "**00000000**" i.e. 8x Zero's

(Admin ID cannot be changed, as this is the full administrator ID)

MENU Navigation

To enter the set-up menu press the Menu button or right click with mouse on screen The following screen will be displayed.

Enter the password (default password is 00000000 – 8 zeros).

Front Panel or IR remote control

All menus are navigated around using the left / Right / Up / Down and the Select button.

To step back through the menus press MENU button

Mouse control

Using the mouse allows the operator to enter the Menus to set up the Quantum or enter the Search functions to play back and archive recorded data..

Right Clicking will bring up the following screen:

Left click the required icon from:
Menu, Search, Record, Power down, Play Forward, Audio Eject, Channel Select and Multi Screen

When selecting either Menu or Search the following password screen will appear, enter the password by clicking on the numbers.

If Menu has been selected the following screen will be displayed.
Select Sub menus by clicking on the relevant title.
Change Values/settings by either double clicking to bring up the following keyboard:

Or to change other values simply multi click the segments, which will toggle through available settings

MENU Settings

1 .DISPLAY

Camera Setting: Brightness, Saturation, Contrast, Hue and default

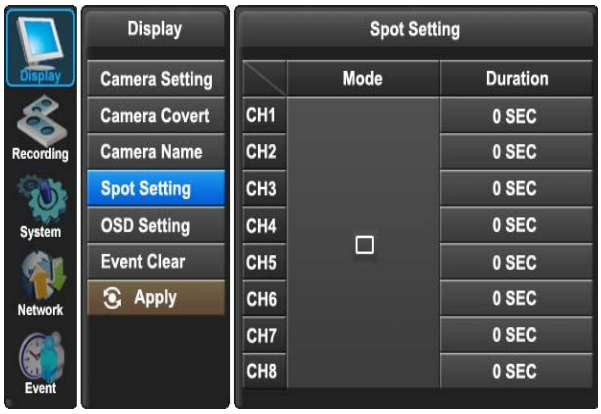
The picture displayed from each camera can be individually adjusted to balance the multi screen view.

Use UP(▲) / DOWN(▼) or Numeric buttons on the front panel or left button on the Mouse to move to next menu. To move to the submenu, use the SELECT button, or double click mouse to bring up keyboard display

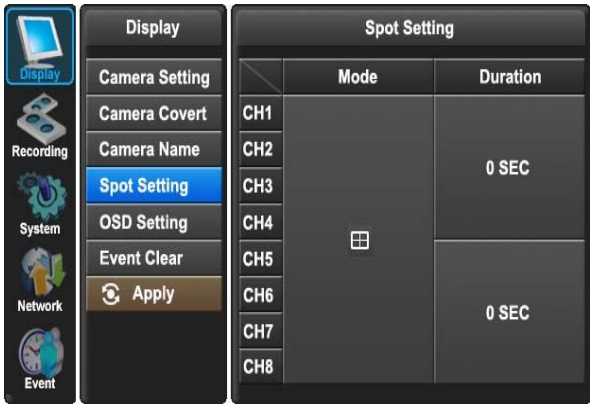
Camera Covert
Cameras can be hidden from the viewer in live or play back mode. Turn the camera on or off using the left and right buttons around the SELECT button. Or toggle on and off with left clicks of the mouse.

Camera Name
Each camera can be titled using the alphanumeric buttons on the front panel or the mouse. Each title can have up to 32 characters, if there are too many characters to display in 1 line, it will be shown as _... For example, ‘FIRST MEETING ROOM’ -> ‘FIRST MEETIN…’

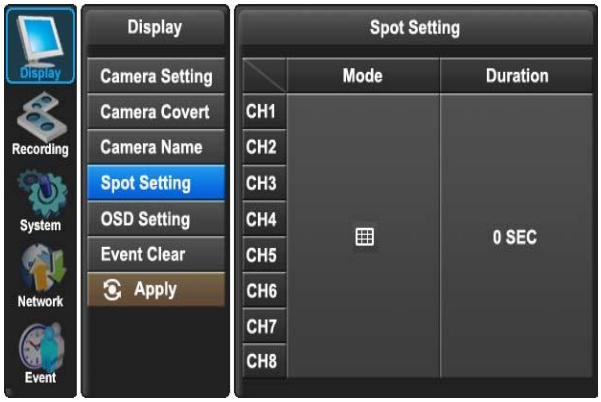
Spot Setting



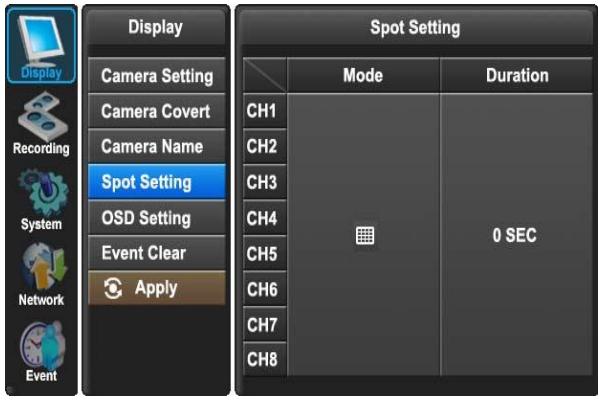
<Single Screen>



<Quad Screen>



<9 Channel Divisions>



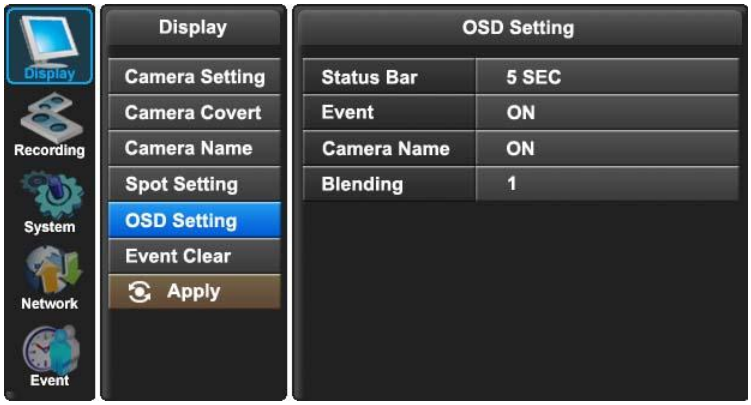
<16 Channel Divisions>

Spot output is used to configure the second monitor output. The Spot monitor can respond to Alarms, Motion, Audio, or can be configured for full or multi-screen sequences.

Select the Mode required then configure the duration required for the display of that mode..

OSD Setting

On Screen Display Setting: Selecting whether the time and date etc is shown on the screen or not.



Event Clear
This is used to erase the list, in the memory, of previous events such as alarm activations.

APPLY: In order to save any modified setting value, please press “SEL” key when the “APPLY” section is highlighted. This action can be carried out within each Sub Menu.

2. RECORDING

All recorded data is watermarked to ensure that it is not tampered with. Using the software supplied the legitimacy of this data can be verified.

Global

Within this section:

1. Watermarking should be set to on, this allows the supplied software to verify the downloaded information to ensure it has not been tampered with or changed.
2. Repeat recording can be set to continually overwrite or stop when the drives are full.
3. Pre Recording resolution can be set to 4CIF (D1) – 720 X 576 (giving 100fps recording) or 2CIF -720 X 288 (200fps) or CIF - 360 X 288 (400fps).
4. Pre FPS/Pre Duration/Post Duration is recommended to set active to get data just before event occurs. Post Duration is selectable.
   -Pre FPS: Value dependant on Pre resolution setting (up to 25 FPS)
   -Pre Duration & Post Duration: 5/30/60/90/120/150/180/210/240 sec.
5. Quality options are High, Middle or Low

These settings are applied to all channels.

Normal (TL)

This configures the continuous recording settings per channel

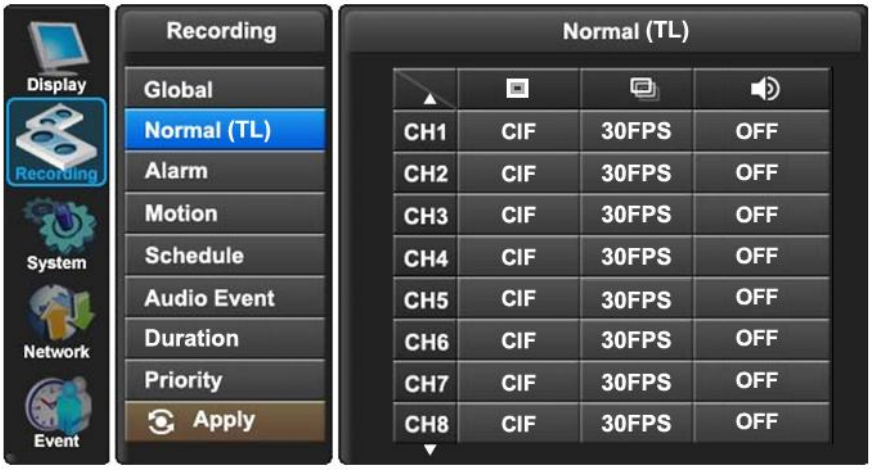
Record rates available:

In 360x288 modes, 25 fps is available to each channel (total 400fps).

In 720x288 mode 12.5 fps is available to each channel (Total 200fps).

In 720x576 mode 6.25 fps is available to each channel (Total 100fps).

Each channel can be individually configured for record rate and Audio on/off.



Alarm

There are 16 Alarm inputs on the rear of the Quantum these can be used to initiate the Alarm record mode.

The Alarm recording is set up in the same way as Normal Recording.

Motion

Motion on any channel can trigger recording of that camera.

Resolution, Images Per second, Audio, and Quality can all be configured individually per channel. As per Normal and Alarm Recording Modes.

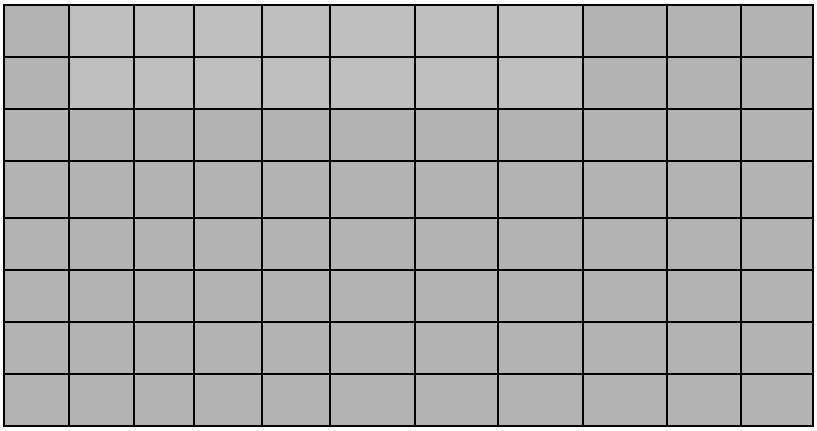
To setup the motion detection grid per channel select the “Sel” button.

Motion Sensitivity

It consists of High, Mid or Low.

Motion Region

The following will be displayed when “Sel” is selected.



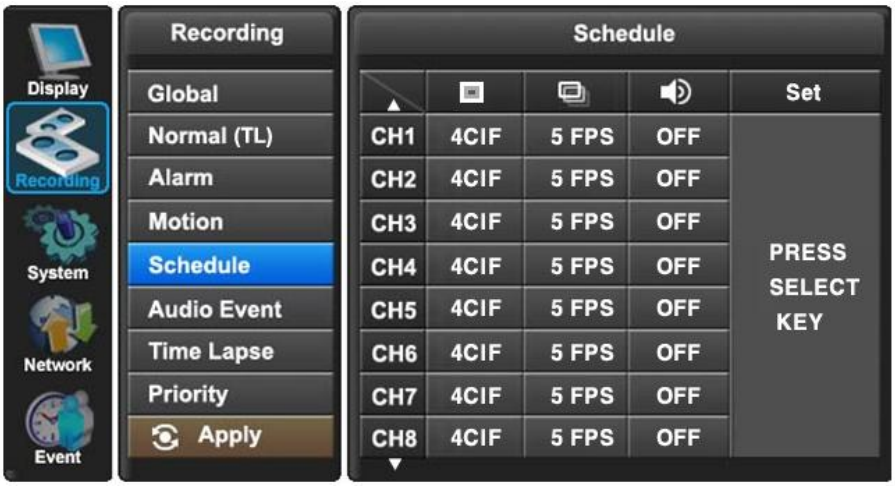
The detection area is divided into a grid of 11x8 cells. Default is all cells in active mode.
Use the Left right up down to move cursor and the Select key to toggle between active and inactive.

The mouse can also be used to select cells and toggle them on and off.

Double clicking on one of the 4 dots in the corner of the selected cell, will toggle between all cells being active or inactive.

Care must be taken in setting of the motion sensitivity. It is recommended that each level is testing to find out which one suits that particular camera site. The motion detection is not recommended for external cameras.

Schedule



The schedule allows the Quantum DVR to be set to only record at particular times of the day. This timing setting is global for all channels. However the Resolution, Images per second and Audio can be configured per channel.

To set the timetable select the large SET box on the right of the menu page, the following page will appear. It allows each hour within the week to be set to be either Active (Orange) or Inactive (Grey)

"SEL" button is used for selecting relevant time and day. Arrow Key will be used for movement. Or toggle between on and off with the mouse.

Audio Event

16 Audio Inputs and 1 Output are available. Recording can be triggered when Audio is detected. As with Normal and Alarm recording the Resolution, Images per second can be set per channel. Individual channels can be enabled or disabled and the sensitivity set to either Low, Middle or High.

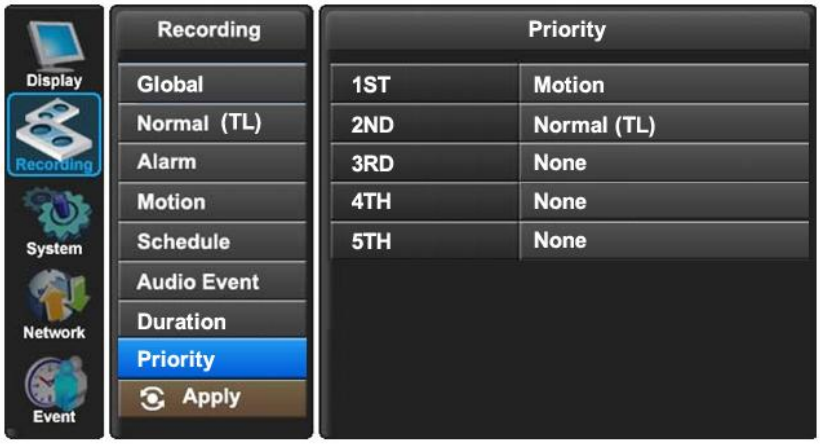
Duration

The Duration mode allows the user to set the number of days that they require to record for. The resolution; whether cameras are active or not and whether audio is being recorded can each be set per channel. The user then sets the number of days of recording required, then the Quantum will automatically calculate best record rate to achieve these settings

NOTE:

If recording is in Standby mode, the following icon is displayed.

Priority



The RECORD PRIORITY allows the mixing of the various record methods to customise the individual site requirements.

Example: A site may require Alarm recording at night, then a standard FPS recording during the day. In this case the Schedule would be set for required FPS and resolution, and the timetable set for this recording between 8am and 8pm each day. Schedule would be set as 1st Priority. The Alarm settings would be configured as required and this would be set as the 2nd priority.

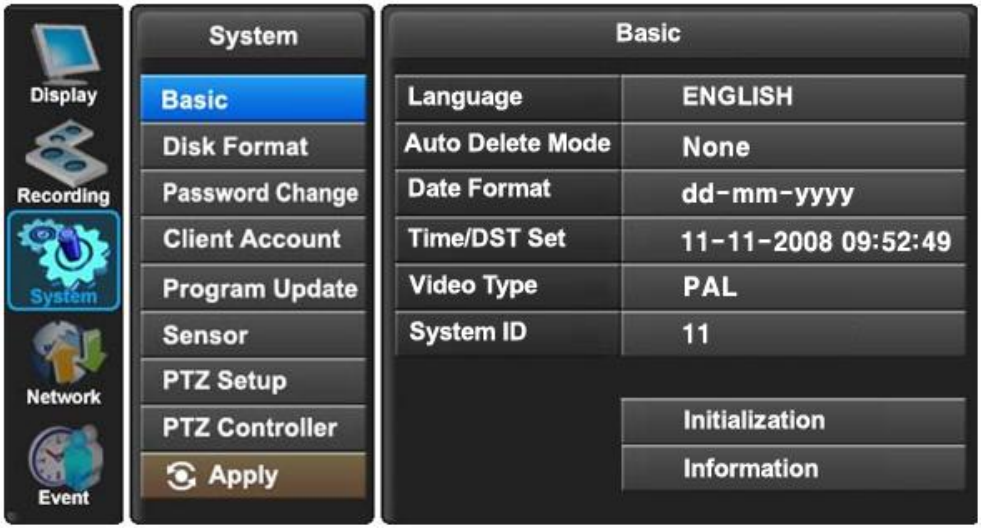
The Quantum would then record between 8am and 8pm at the Scheduled rate, then once beyond 8pm would look to the second priority and only record Alarm Events.

3. SYSTEM

The SYSTEM menu is where all the non-recording based settings are configured

Basic

User can set Language, Auto Delete Mode, Date Format, Time/DST Set, Video Type, System ID. Also, Initialisation and system Information is available.

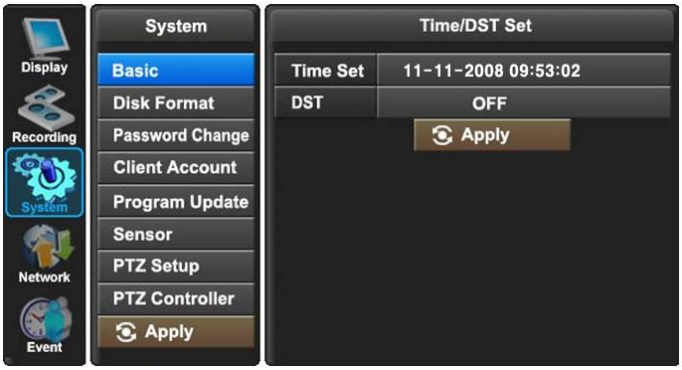


Language
The default is English. Italian, French, Hungarian, Slovak, German, Russian, Chinese, Dutch, Spanish, Portuguese, Japanese and Polish are available.

Auto Delete Mode
Auto Delete Mode can be set to Automatically erase recorded information over a certain number of days. User can select from 00days to 99days.

Date Format
The default is dd-mm-yyyy. Other date formats available are: mm-dd-yyyy / / yyyy-mm-dd.

Time/DST Setting



To set the DST, the simplest way is to set the DST box in the menu to the country required. If the relevant country is not available then set the DST box to User Define, fill in the date and time that the time changes are due to occur

PLAYBACK FOLLOWING TIME CHANGE

The DVR uses the time and date to index video on the hard disk drive so you can find it later. Changing the time can cause the DVR to work improperly, when you try to play back video. If you set the hour ahead, this is not a problem. But, if you set the hour back, there will be more than one recording with the same time stamp.

Such as during the October Daylight Saving Time changeover, if you try to search for video between 1 am and 2 am, the recorder may not operate properly because there will be two hours of recorded video during this time period. To view video during this overlapping time period, you must start playback before 1 am, then recorder will play both hours between 1 am and 2 a.m.

You cannot do a backward search through the overlapping time. But, you can do forward search.

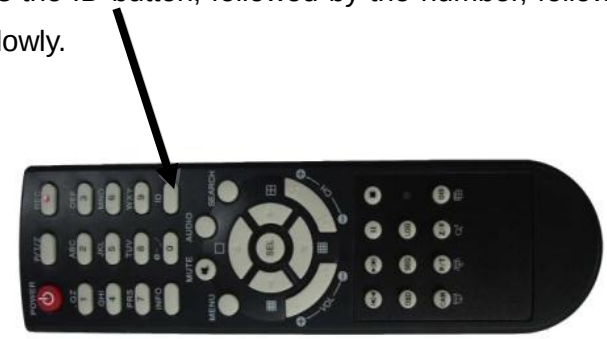
The Time and Date and the DST time can be changed from the front panel, the Mouse or the Remote Control

Video Type
Video Type can set in this menu without rebooting or initialisation. The default is PAL, NTSC can also be selected

System ID
The remote control can be used to control up to 16 Quantum's, the ID number on each can be set to a unique address so that the remote will only control one at a time if they are in close proximity. The default is 11.

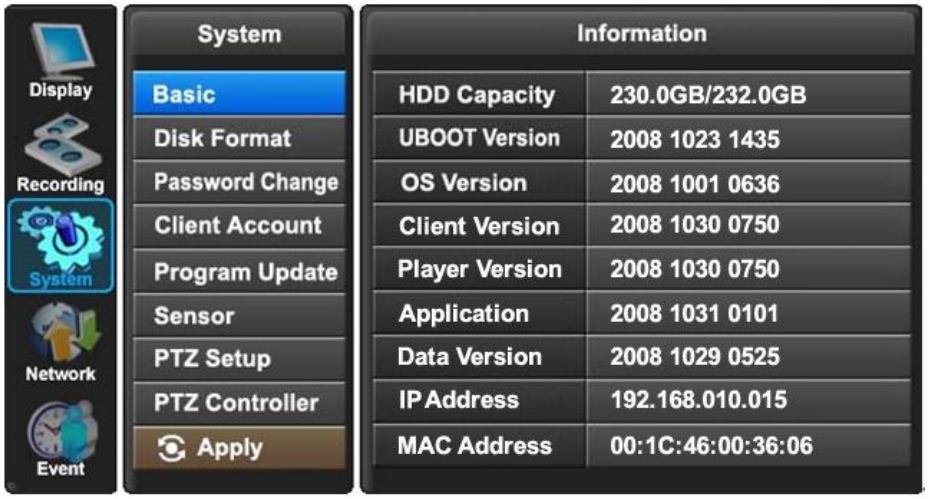
Use the right arrow to select then the up and down arrow to change the ID number.

To select a unit on the remote control press the ID button, followed by the number, followed by the ID button again. The LED will flash slowly.



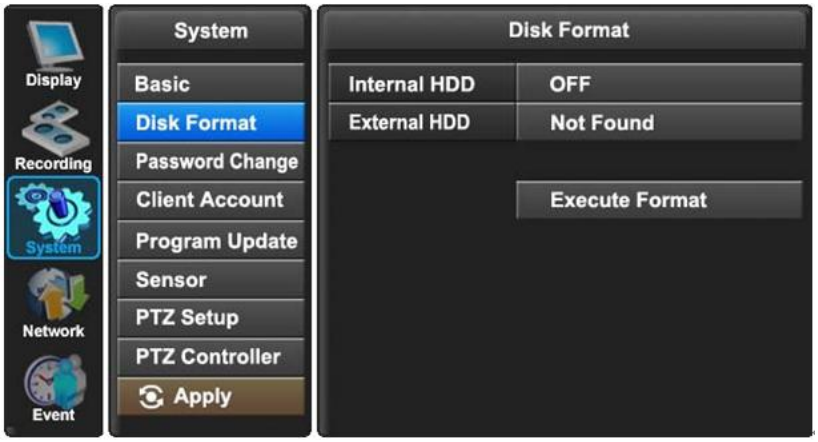
Initialization
All the menu settings will be returned to the factory default. To carry out this function the system recording will have to be turned off.

Information
The Information Screen shows the hard disk size, current firmware revisions, IP address and MAC address



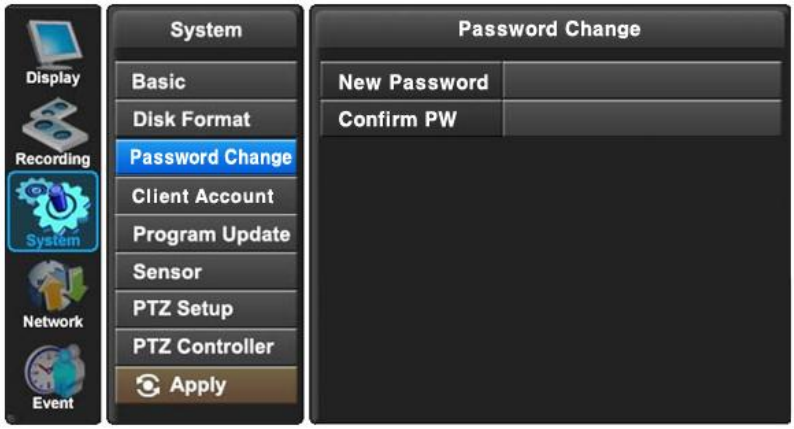
Disk Format

Formatting of the drive is used when new drives are installed or you need to wipe all information on the disk.



Password Change

The password can be change from the factory default to a more secure one, a note of any new password should be taken and stored in a secure place.



CLIENT ACCOUNT

When viewing over a network up to 6 connections can be made simultaneously, one can have complete control e.g. view live and playback, and the other 5 can view live only.

Network users can be set up under this menu; a name and password need to be entered for each account.

Once setup they will appear in the User1~5 section of the page.

Program Update

Always turn off: Recording, Playback and Network access while upgrading the unit

The latest firmware version can be upgraded through USB 2.0 Port using Memory Stick or CD/DVD Media. When a memory stick is connected to the USB port, this symbol will be shown in the status bar of the screen.

Enter "menu"-> "System Set"-> "Program Update". If the system recognizes the new firmware then, "New program found" will be displayed on the screen.
Next press the "SELECT" button.

Processing percentage will be displayed.

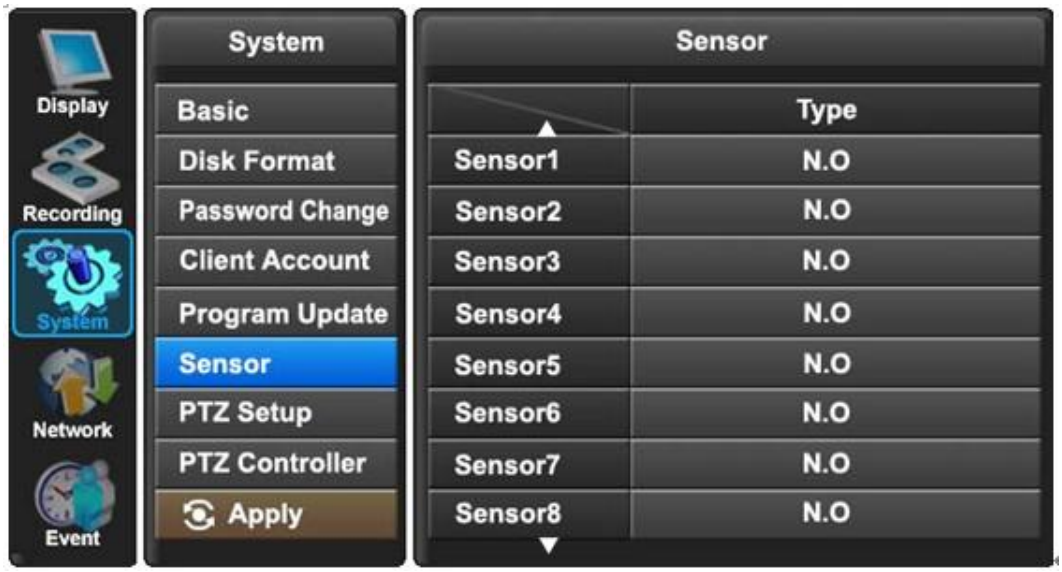
NOTE.

1. If the system doesn't recognize the new firmware, "New program not found" will be displayed.
2. USB compatibility has been tested successfully with: Lexar Jumpdrive 128/256MB, Sandisk Mini Cruzer & Cruzer Micro 2GB, KINGSTONE 2GB, A-DATA 2GB, IMATION 2GB, SANDISK 1GB, SANDISK 512MB, MARUZEN 1GB

3. For system stability, please turn off 1) recording 2) playback 3) network connection during upgrading.
4. After updating program, reboot the DVR. The simplest way is press POWER button and enter the password.

SENSOR

The 16 alarm inputs and 1 output on the rear of the Quantum can be configured to be normally open (N.O), normally closed (N.C) or None.

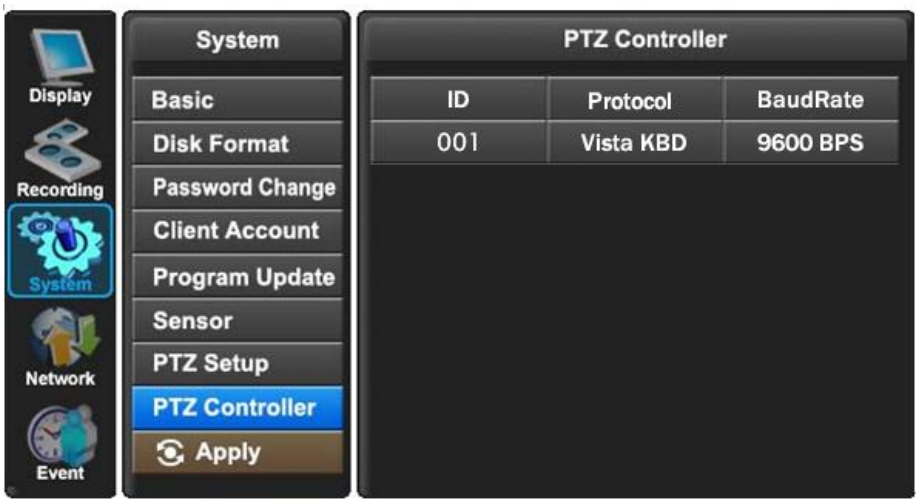


PTZ Setup

The Quantum Plus can control PTZ cameras via an RS485 connection from the rear of the DVR. The cameras can have individually selectable Protocols with a choice of Vista PD, Pelco P or Pelco D. The Baud rate can also be selected.

PTZ Controller

The Quantum DVR needs to be setup to accept the VKBD3im keyboard, as a default this will be set to the correct Protocol and Baud rate, the ID RS485 Address my need to be adjusted dependant on the number of PTZ cameras on the system. The Keyboard ID should not be the same as any of the domes on the system.



Telemetry connections and User Instructions

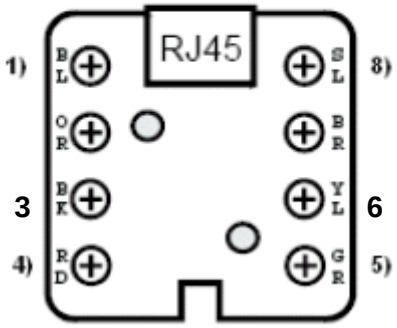
Remote Keyboard Connections

The connection of the VKBD3im keyboard to the Quantum Plus DVR, is made via the push connectors marked as **Keypad** on the rear of the DVR

Use the break out box and one of the RJ45 Leads supplied with the VKBD3im keyboard.

Connect pin **3** of the break out box the Keypad **(+VE)**
Connect pin **6** of the break out box to the Keypad **(-VE)**

Breakout Box Pins



Connect the break out box to the keyboard using the RJ45 patch lead.

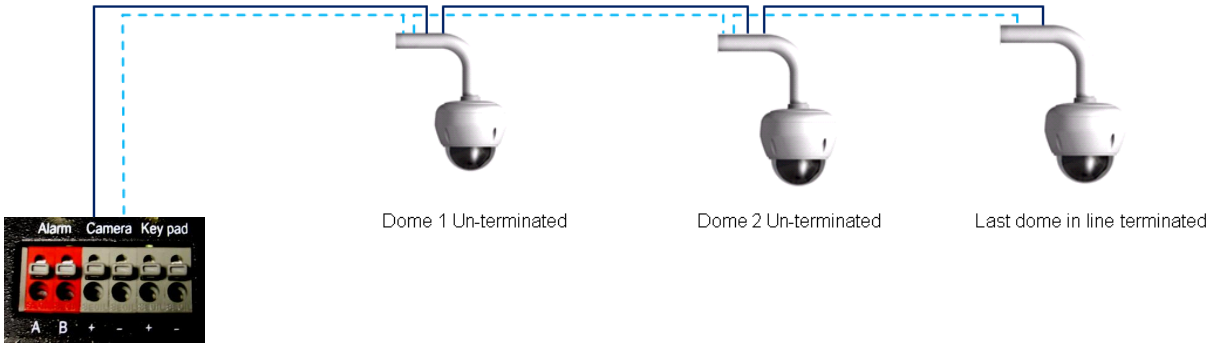
More detail can be found in the VKBD3im manual

RS485 Dome Telemetry connections

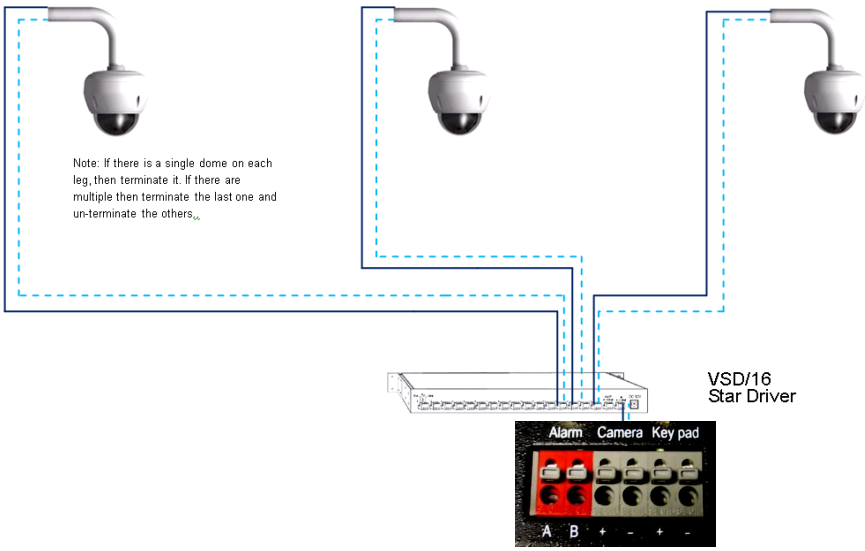
The connection to RS485 domes is made via the push connectors marked as **Camera** on the rear of the Quantum.

The domes can be wired either in a Daisy chain or star configuration, examples shown below. If using a Star configuration you require a “VSD16” RS485 star driver.

Daisy Chain configuration



Star Configuration



PTZ user instructions

The telemetry function of the Quantum Plus can be controlled via 4 different methods:

1. VKBD3im keyboard
2. Front panel buttons
3. Remote control
4. Software viewer

VKBD3im Keyboard – See keyboard manual for control of PTZ cameras

Front Panel

Camera selection

The PTZ cameras can be controlled in either full screen or split screen mode. If in full screen mode press the camera selection key , the camera icon will step from one camera to the next on the split screen. When the icon appears on the camera to be controlled then press the PTZ key

.

If in full screen mode then simply press the PTZ key

.

Pan and Tilt control

To move the dome left / right / up or down use the arrows keys .

Zoom and Focus control

To select Zoom and Focus press the Zoom Key

,

Zoom + =

Zoom - =

Focus Near =

Focus Far =

Preset positions

1. To store a preset position

Move the camera to the required position then press the record key followed by the number key of the preset to be stored (1 – 9)

2. To recall a Preset

Press the search key

followed by the number (1 -9).

Run Tour 1

To run Tour 1, press the search key

followed by the number 0 (Zero). The tour requires a keyboard to set it up in the domes menu.

Remote control functions

Camera selection

The PTZ cameras can be controlled in either full screen or split screen mode. If in full screen mode press the camera selection key

, the camera icon will step from one camera to the next on the split screen. When the icon appears on the camera to be controlled then press the PTZ key

.

If in full screen mode then simply press the PTZ key

.

Pan and Tilt control

To move the dome left / right / up or down use the arrows keys

.

Zoom and Focus control

To select Zoom and Focus press the Zoom Key

, Zoom + =

Zoom - =

Focus Near =

Focus Far =

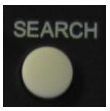
Preset positions

3. To store a preset position

Move the camera to the required position then press the record key

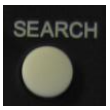
followed by the number key of the preset to be stored (1 – 9)

4. To recall a Preset

Press the search key 

followed by the number (1 -9).

Run Tour 1

To run Tour 1, press the search key 

followed by the number 0 (Zero). The tour requires a keyboard to set it up in the domes menu.

Software Viewer – see instructions on pages 95 and 96 of this manual.

NETWORK

(If the DVR is connected to a network, this icon will be shown in the OSD display)

To enter Network set menu, system will ask for a password (Default is 00000000).

With in the Network menu the DDNS (Dynamic Domain Named Server), IP addresses, NTP and Live can be set.

DDNS

What is DDNS?

DDNS is a service that maps Internet domain names to IP addresses. DDNS serves a similar purpose to DNS: DDNS allows anyone hosting a Web or FTP server to advertise a public name to prospective users.

Unlike DNS that only works with static IP addresses, DDNS works with dynamic IP addresses, such as those assigned by an ISP or other DHCP server.

What this means is that the DVR does not need a Static IP address to be available for viewing remotely over the World Wide Web.

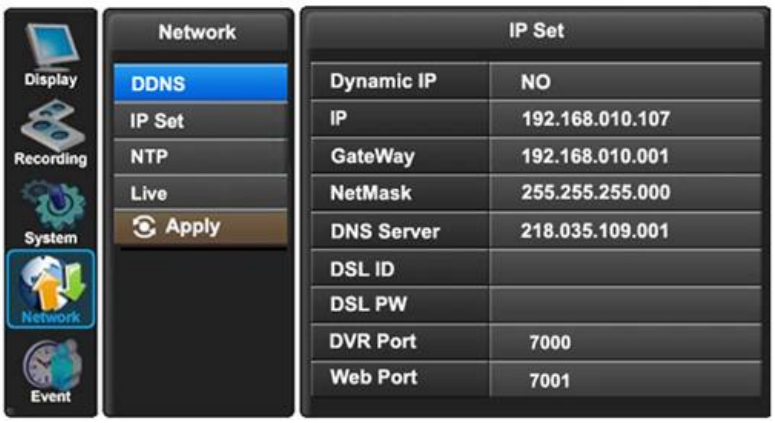
Please refer to Appendixes 4 on how to set up the DDNS service.

IP SET

When a fixed IP address is being used, the Use Dynamic IP should be set to NO

The IP Address, Gateway and Subnet Mask need to be set, these will generally be given by the Network Manager.

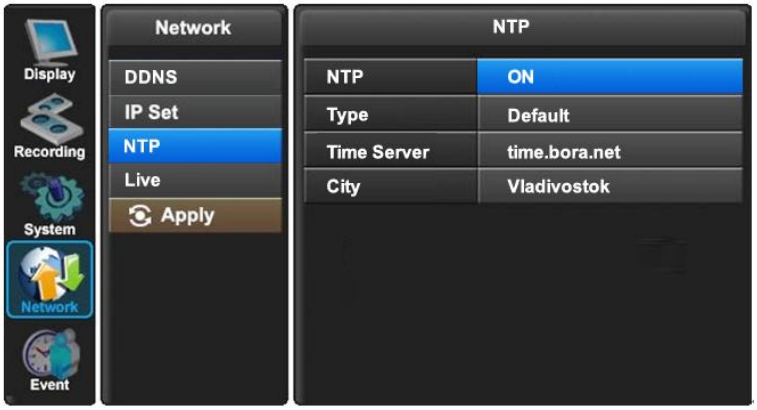
DSL refers to all types of Digital Subscriber Line such as ADSL and SDSL.



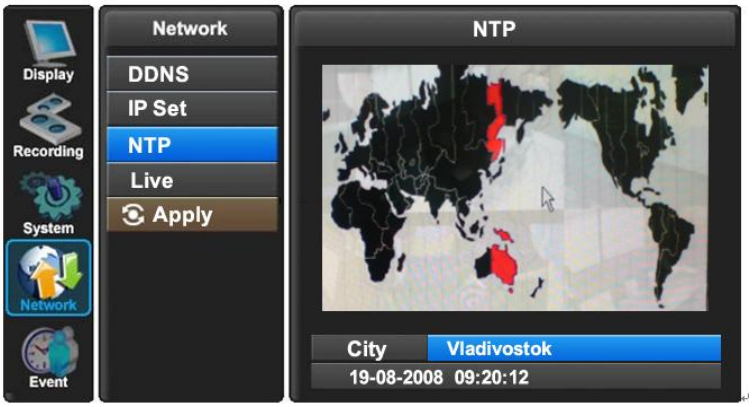
NTP

The Network Time Protocol Setting allows the DVR time to be synchronised with an external time server.

The default is NTP OFF. When turned on the Type of service can be selected, options are Default (time.bora.net), Domain and IP. As shown in next diagram:



The Time zone can also be chosen within the City selection.



LIVE

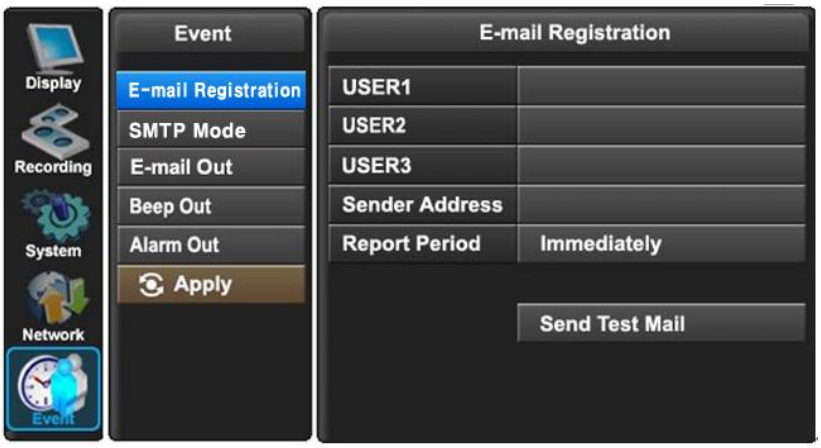
It allows a separate Live resolution and Quality, regardless of System Recording and Quality, to be set, this helps optimise the network streaming.

5. Event

This section is used to inform the user as to an event occurring, this can be by the sounding of a buzzer or by sending an E-mail to a predefined address.

E-Mail Registration

Within this section up to 3 users can be set-up to receive an email on the occurrence of an event such as Video Loss / Alarm / Motion or Power Loss. An E-mail will only be sent if the Quantum Plus is sitting on a network with access to the Internet, e.g. through a router.



The e-mail addresses are set via the alphanumeric buttons on the front panel, or from the on screen keyboard via the mouse.

For SENDER MAIL ID and SENDER DOMAIN, this is best explained by an example, if the following is input:

SENDER MAIL ID: QUANTUMPLUS

SENDER DOMAIN: NORBAIN.CO.UK

Then the receiver will receive a mail from QUANTUMPLUS@NORBAIN.CO.UK

Note: This is not a valid e-mail address for replies.

SEND TEST MAIL sends a test E-mail to the addresses so allowing the installer to verify if the setup is correct.

SMTP Mode

The SMTP function allows e-mails to be sent over a LAN

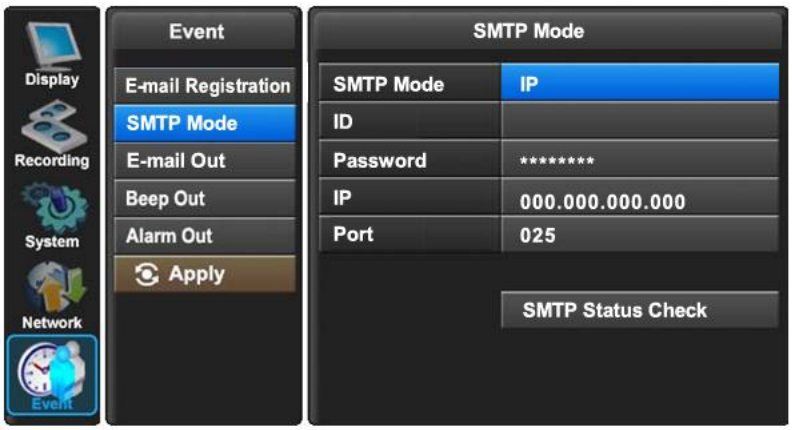
The default is SMTP Mode “OFF”.

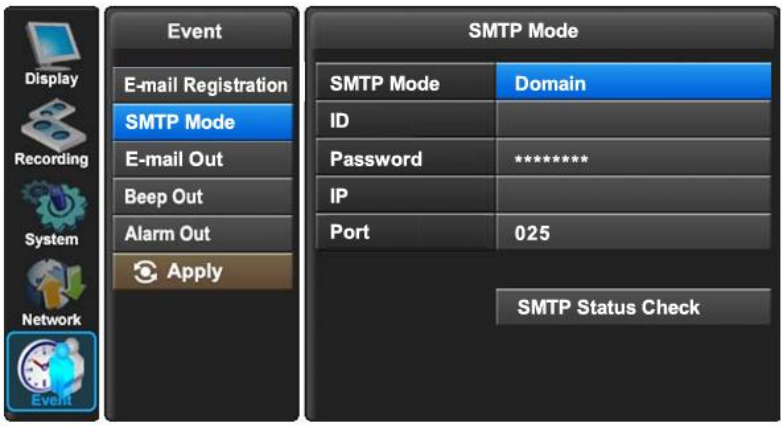
In order to activate SMTP Mode, choose SMTP Mode either IP or Domain first.

Then, put ID, Password, IP address, and port.

Finally press “SMTP Status Check” to see whether it works.

Please see the screen shots that follow:





E-mail Out

As well as e-mail on event activations the Quantum can be set to send a report of what has happened daily / weekly or immediately. This sends a mail containing the log report.

Beep Out and Alarm Out

When an event (e.g. Video loss, Alarm, Motion or power loss) occurs the following actions can be triggered:

E-mail – As described in previous section

Beep – The buzzer can be sounded.

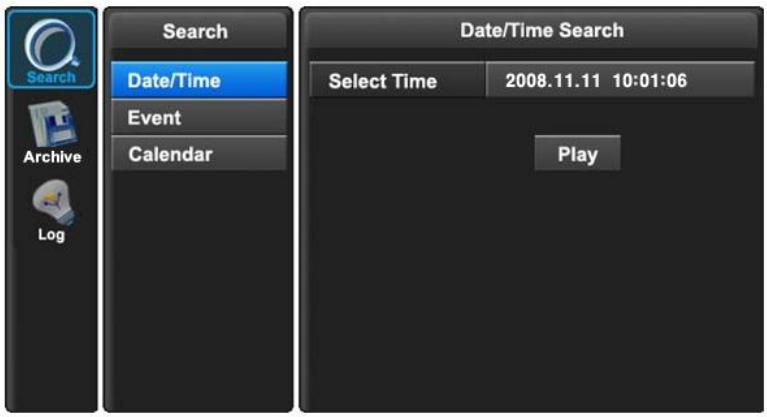
Alarm out – The relay contact on the rear of the unit can be closed.

SEARCHING VIDEO FOOTAGE

To access the search option, press the SEARCH button on the front panel or right click the mouse and select Search, (A password may have to be entered) after which the following screen will be displayed.

Date / Time Search

If you select date/time search, the following will be shown. Use the numerical number on the front panel or the mouse to select the time and date required, then select Play.



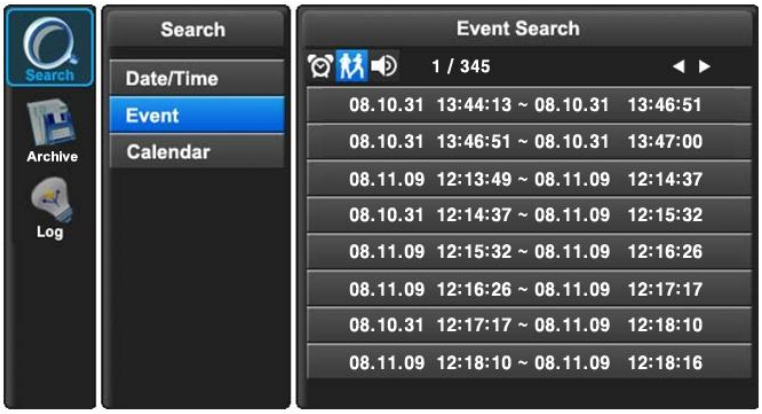
EVENT

This allows the user to select between ALARM, MOTION or AUDIO. Select required option by pressing the right arrow, or selecting with the mouse.

ALARM – The search is for any alarm activation within the times defined.

MOTION – The search is for any motion events within the times defined.

AUDIO – The search is for any audio activations within the times defined.



Calendar Search

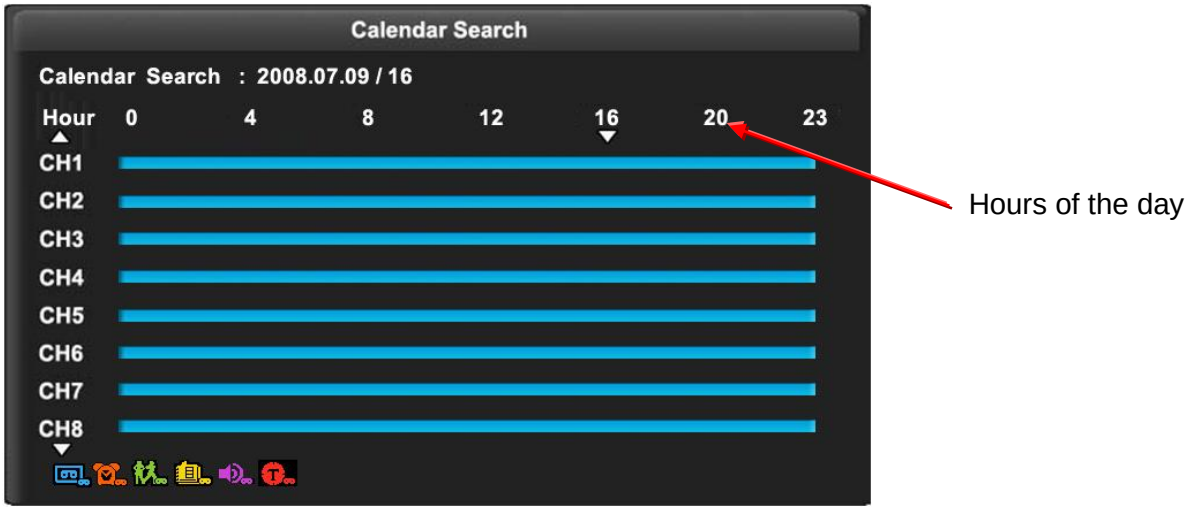
Following screen is displayed when “Calendar” search is selected.

The Calendar search gives a graphical representation of when video is recorded on the hard drive.

The year and month can be selected. This month is shown as a calendar on the screen, any day which contains recorded video will be indicated by a highlighted number in white.

Move to the desired day by using the up / down / left / right buttons, Select the day by pressing SEL.

The following screen will be displayed.



The hours which have recorded data are displayed as a coloured bar. Select the hour which you want to review, the following screen will be displayed.

The minutes which have recorded data will be displayed as a coloured bar, click on the time required; the recorded data will be played back from this point.

*** Preview function**

Before actual viewing of recorded data from the calendar menu, it is possible to preview the selected time and date on the screen behind the search window. This is done by selecting a time and pressing the “ZOOM” button on the front panel. If a different time is required, select it and press “ZOOM “again.

Archiving Evidence to DVD/CD or USB

Once the required video has been found**,** it may be necessary to down load it for evidential purposes. This can be done either onto the internal CD/DVD-R writer or via the USB port on the front of the Quantum Plus.

To do this press the SEARCH button and using the down button move to ARCHIVE, once highlighted press SEL, the following screen will be displayed.

Device
This allows selection between the internal CD /DVD-R writer and the FLASH option via the USB port, when highlighted use the right arrow to toggle between the options.

Device Format
Format for **CD/DVD-R** is **not** needed. When using **a USB pen**, the format **should** be done first.

Type
EXCLUSIVE file type
If evidence is downloaded as an Exclusive file, the Quantum Plus will download bespoke player software on to the CD / DVD or USB device along with the evidence. This means that no special software is required, by the reviewing PC. This format is secure and watermarked.

LOG

The Log file can be downloaded from this menu screen, simply tick the LOG box and do not select any camera channels, then select transfer.

From/ To

You can set up the start and stop time which is required to be backed up to the internal **CD/DVD-R or USB device.**

Highlight this option, then press SEL, then use the alphanumeric buttons or the mouse to set the time and date. Repeat for the end time.

Channel

As long as the EXCLUSIVE file format is selected, the number of channels to be down loaded can be selected. Anything from a single channel to all 16 can be selected.

Calculate Archive size

Once the time and date and file format have been entered, it is necessary to confirm that the size of file created will not exceed the size of memory available on the disk or USB device. Move to Calculated Archive size and press SEL.

The Quantum Plus will then calculate storage space required for download file. This will be displayed in the Required Size section. As long as the Required Size is smaller than the Free/ total space, then move to Transfer and select it.

Transfer

When Transfer is highlighted press SEL, the downloading will start. Percentage done during downloading will be shown.

* USB compatibility: the following have been tested

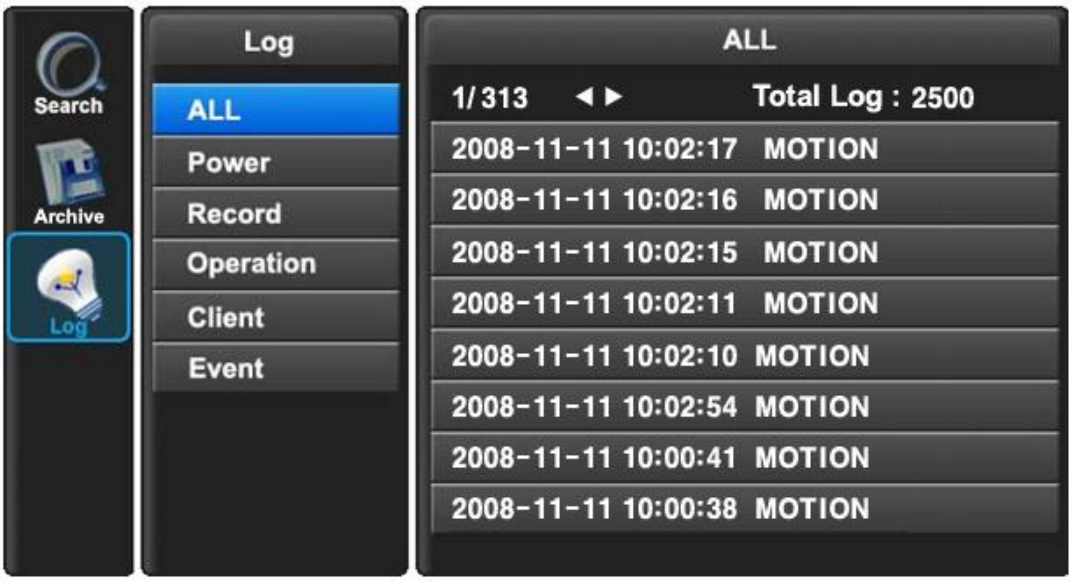
Lexar JumpDrive	128/256MB
SanDisk Mini Cruzer	128MB
SanDisk Cruzer Micro	256MB, 512GB, 1GB
KINGSTONE	2GB
A-DATA	2GB
IMATION	2GB
MARUZEN	1GB
DVD/RW Plextor	PX-716UFL
Lite-On CD/RW	(LTR-52327SX)

LOG

The log file contains information on the following:

Power:	Power on, Power off, Power fail
Record:	Rec fail, Rec start, Rec stop, Rec error, Rec full
Operation:	Play start, Play stop, HDD format, Menu set
Client:	R_Login, R_Logout, R_Logfail, R_Play, R_Transfer, R_Rec on, R_Rec off, R_Upgrade
Event:	Alarm, Motion, Audio, Video loss, Email fail

A total of 2500 events can be recorded the oldest being overwritten when a new one occurs, they can be viewed all together or as individual types..



Client Viewer software – QT Player

Each Quantum comes with license free viewer software to view the Quantum across a network.

To be able to do this the recommended minimum specification for the PC is as follows:

Minimum PC specification

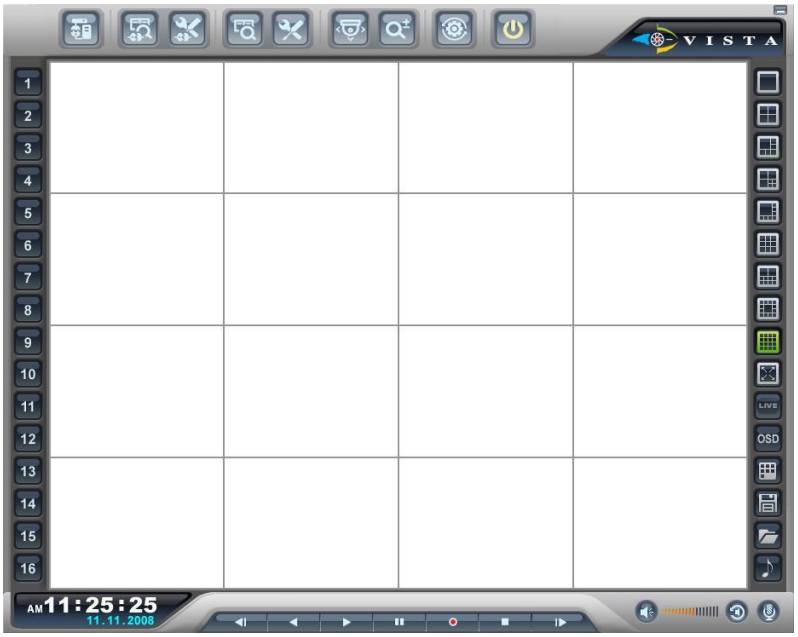
> CPU: Core 2 Duo 1.8GHz,
> Graphic Memory: 256MB

Installing software

When you put Quantum Network installation CD into your PC, it will auto run and lead you through an installation wizard. Follow the instructions. Once the software is loaded it will automatically run.

Connection

To connect to the Unit, open the Viewer Software and click the connection button,



LOG IN

The following window will appear. To connect to the Quantum, enter the units: IP address; DVR Port (2000 ids default), ID and Password. Then, click “OK”, to start the live monitoring.

Explanation of Screen Buttons

Live Monitoring

The software is best viewed with the PC monitor resolution, set to: 1024 x 768.

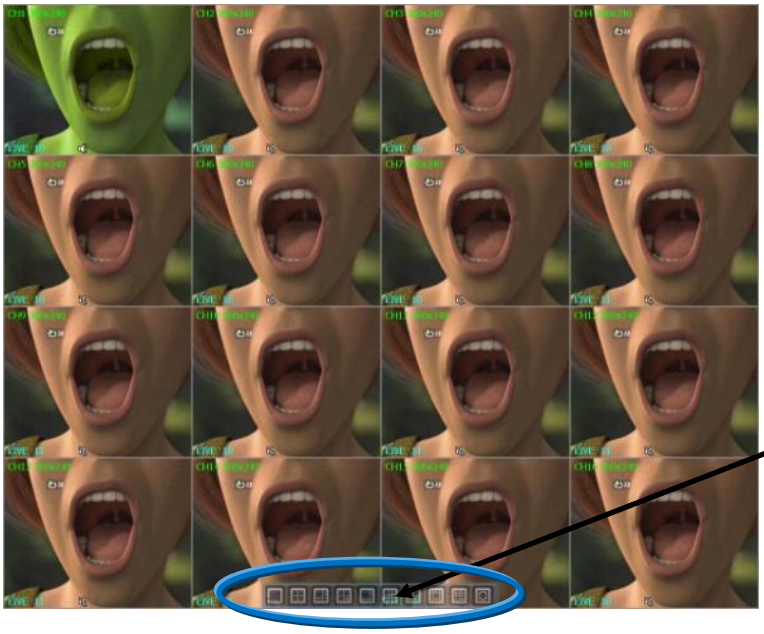
Split Screen options (1, 4, 6, 7, 8, 9, 10, 13,16):

Spilt Screens can be viewed during both live and playback. The splits screens available are: full screen,4,6,7, 8,9,10,13 and 16 way.

1) Full Screen

2) 10 Way

Full Screen on/ off



When the full screen button is selected, a tool bar offering the various split screen options, and the Exit key will be displayed at the bottom of the screen.

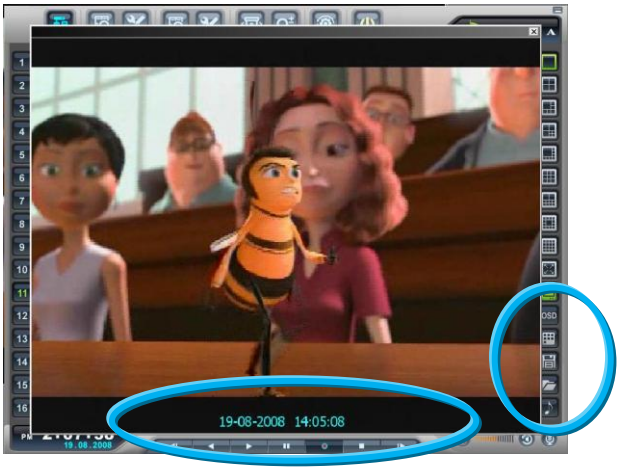
OSD on/off:

The OSD button will toggle between the On screen titles etc being shown or hidden

(SMART)ARRANGE ON/OFF:

If Cameras are being displayed in segments that are not logical, the Smart button will rearrange and put camera input 1 into segment 1 etc.

Image Save / Load:



SAVE: This icon is used to save a still image in either JPEG or BMP or TIF format. There is no change on the main screen when the “Save” icon is pressed.

LOAD: This icon is used to retrieve and view a saved still image, when selected a list of available images will be shown. Select to one required, it will be displayed along with data information (Status-Live/Playback, IP address, CH No.).

Playback (Step Backward, Backward, Playback, Pause, Recording, Stop, Step Forward)

Audio (Mute, Volume, Select Audio, Microphone)

Select Audio: Toggles through audio channels.

Microphone: It is used for transmitting audio to the System through a microphone.

Remote search

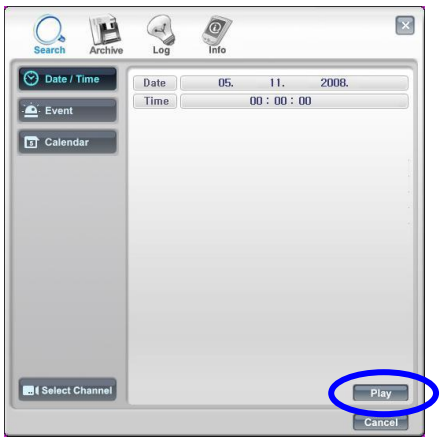
Search (Date/Time/Event/Calendar), Archive (Remote Archive), Log (Remote Log) are available.

SEARCH

This Remote Search is able to play back video on the PC direct from the hard disk storage on the Quantum Plus. There are 3 options for as follows.

1) Date/Time
2) Event
3) Calendar

Date/Time



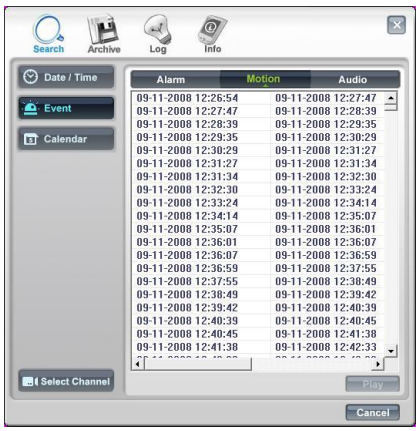
Enter the Date and Time, by using the drop down buttons. Once set click on the Play button.

Click “Play” button, this window disappears and Remote Playback will start.

To stop playing back press Stop

then press live .

Event



Select the type of Event to be searched for, by clicking on the either: Alarm, Motion or Audio at top of screen.

A list of the available events will appear. To play an Event select it and click Play.

To stop playing back press Stop

then press live .

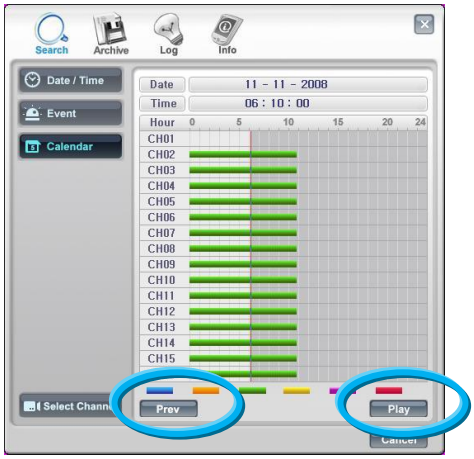
Calendar

Select the date required (as long as the date is highlighted in Blue there is recorded data on from that day).

There are 3 options for selecting the required time once the date has been selected.

1) Drag the Red line along the colour bar (I.e. Blue: Normal Recording) till the required time is reached.
2) Click on the required time for playback on the blue bar then the red line will move to this point.
3) Hover over the time box, a drop down arrow will appear allowing the manual selection of Hours, mins and seconds.

Next click the “Play” button for Remote Playback. Or, click “Prev” to go back to previous stage.



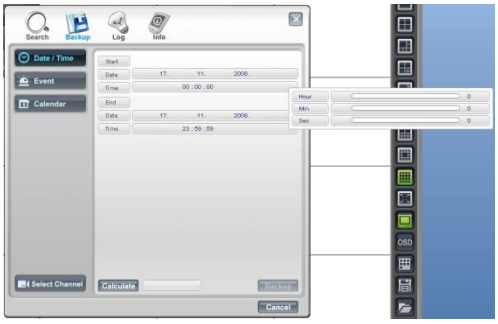
Select Channel:

Channels can be included or excluded dependent on query. This is available within Search, Backup and Logs.

.

ARCHIVE

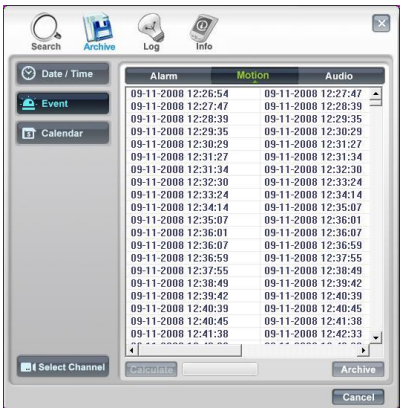
- Remote Archive – Date/Time



Enter the Start and End dates and times, by hovering over the selections, a drop down box will appear.

Once selection is made, then “click” calculate, the file size will be displayed. Finally click “Archive”, the file will be transferred to C:\QTplayer\Download.

- Remote Archive – Event



Select either: Alarm, Motion or Audio from the top of the screen. A list of events will appear.

Click on the event required, it will be come highlighted.

Click on Calculate, the file size will be calculated, this may take a few seconds.

Finally click Archive; the file will be transferred to C:\QTplayer\Download.

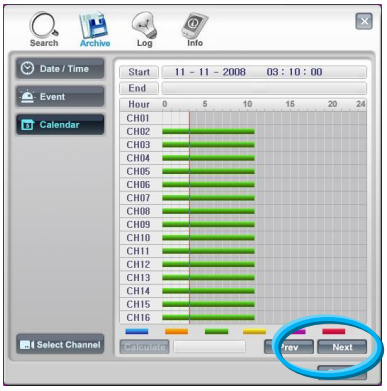
- Remote Archive – Calendar

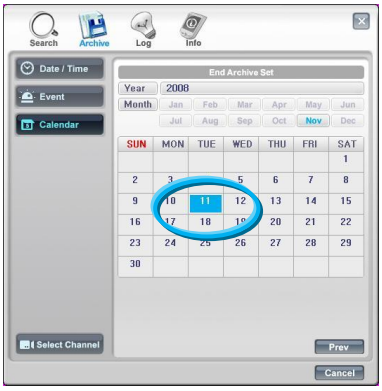
Select the date required (Days with recorded video a data present are highlighted in **Blue**)

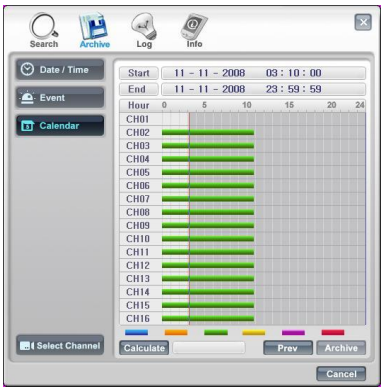
There are 3 options for selecting the required time once the date has been selected.

1) Drag the Red line along the colour bar (I.e. Blue: Normal Recording) till the required time is reached.
2) Click on the required time for playback on the blue bar then the red line will move to this point.
3) Hover over the time box, a drop down arrow will appear allowing the manual selection of Hours, minutes and seconds.

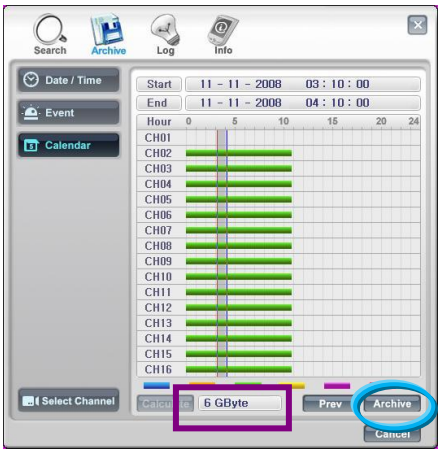
Then click the “Next” button to set “End” Archive time, in the same manner.







The backup procedure is same as Date/Time & Event backup as previous page.

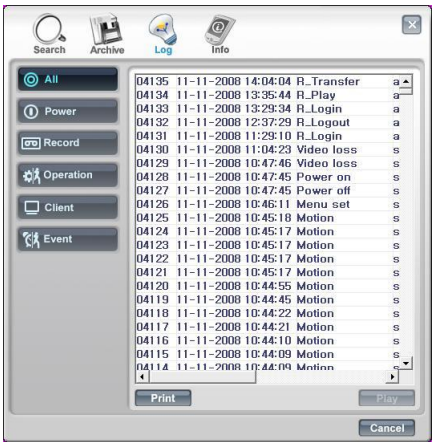


* “Prev” to go back to previous stage.

*The downloaded data is saved in the follows location.

C:\QTplayer\Download

Remote Log



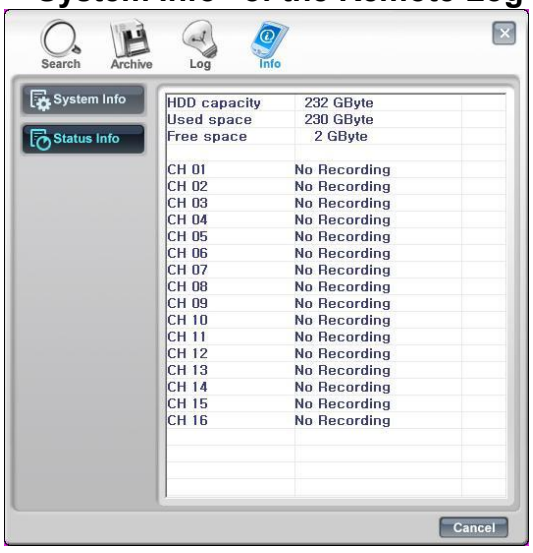
The Log file can either be printed or if viewing the Event Log, the recorded Event can be played, by selecting it and clicking on Play.

The log list can be viewed as a whole or filtered by the following types:

Power:	Power on, Power off,
Record:	Rec fail, Rec start, Rec stop, Rec error, Rec full
Operation:	Play start, Play stop, HDD format, Menu set
Client:	R_Login, R_Logout, R_Logfail, R_Play, R_Transfer, R_Rec on, R_Rec off, R_Upgrade
Event:	Alarm, Motion, Audio, Video loss, Email fail.

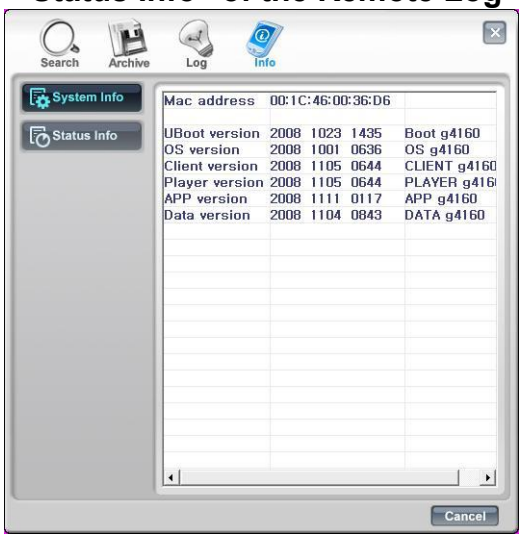
Info

- “System Info” of the Remote Log



The system info displays the Mac address and software version information.

- “Status Info” of the Remote Log



This shows the status of both the Hard disk and the recording modes of each channel.

Remote Setup: Checking settings menu (Same as DVR)

1) Display

– Camera Setting

Within this setting the Hue, Saturation, Contrast and Brightness can be adjusted on a camera by camera basis.

– Camera Covert

Cameras can be remotely set into Covert Mode, they are still being recorded but cannot be viewed local to the system, or by any remote user apart from the Administrator on line.

- Camera Name

Up to 32 Characters are available for each camera name.

- Spot Monitor settings

1) Set “Mode” (Split screen/ Alarm Motion or Event), by click the ON button for the required state – It will turn red.
2) Next select Duration for a sequence using the white time bar, next click OK.

OSD On/Off

The Symbols and text displayed on screen can be controlled:

1. The status bar can be set to be off/ Always on or be on for 5 or 10 seconds after a key press.
2. The Event symbols such as Motion, Audio, Pan / Tilt can be displayed or turned off.
3. The camera name can be displayed or turned off.

Recording

Global

1. Watermark – security tagging of recorded video.
2. HDD Overwrite – When the disk is full it will overwrite the oldest data.
3. Pre Resolution – Picture quality for pre event recording.
4. Pre Frame Rate – Picture rate for pre event recording.
5. Pre Duration – Length of pre event.
6. Post Duration – Length of recording post event.
7. Quality – Quality.

Normal

Resolution

Each camera can individually have its Resolution, Record rate and whether Audio is active set from this screen.

Rate

Display
Recording
System
Event
Global
Normal (TL)
Alarm
Motion
Schedule
Audio Event
Duration
Priority
Resolution
Rate
Audio
CH01 30 fps
CH02 30 fps
CH03 30 fps
CH04 30 fps
CH05 30 fps
CH06 30 fps
CH07 30 fps
CH08 30 fps
CH09 30 fps
CH10 30 fps
CH11 30 fps
CH12 30 fps
CH13 30 fps
CH14 30 fps
CH15 30 fps
CH16 30 fps
Select all
Unselect all
OK
Cancel

Audio

Display
Recording
System
Event
Global
Normal (TL)
Alarm
Motion
Schedule
Audio Event
Duration
Priority
Resolution
Rate
Audio
CH01 ON OFF
CH02 ON OFF
CH03 ON OFF
CH04 ON OFF
CH05 ON OFF
CH06 ON OFF
CH07 ON OFF
CH08 ON OFF
CH09 ON OFF
CH10 ON OFF
CH11 ON OFF
CH12 ON OFF
CH13 ON OFF
CH14 ON OFF
CH15 ON OFF
CH16 ON OFF
Select all
Unselect all
OK
Cancel

Alarm

The Alarm settings for Resolution, Rate and Audio are configured in the same manner as Normal (Time lapse) see pages 71 and 72.

Motion

The Motion settings for Resolution, Rate and Audio are configured in the same manner as Normal (Time lapse) see pages 71 and 72.

The only additions are the setting up of Sensitivity and the motion detection grid per camera.

Motion Sensitivity

The sensitivity of motion detection can be set on a per camera basis, the sensitivity will have to be adjusted to suit the individual scenes and may require several adjustments to achieve optimum performance.

The detection region setup screen is displayed by clicking the Region button.

Region

Each cameras motion detection grid can be individually tailored for the camera scene. They are set to a default of all on (Yellow).

They can all be turned off by clicking “Unselect all”. Then individually selecting the required boxes or clicking and dragging over an area.

Once set click OK.

Schedule

The Schedule settings for Resolution, Rate and Audio are configured in the same manner as Normal (Time lapse) see pages 71 and 72.

The only addition is the setting up of Schedule grid, click on the SET button to display the following screen..

A timetable can be set in hourly blocks throughout the whole week.

Audio Event

The Quantum Plus can start recording when it detects an Audio event.

The Schedule settings for Resolution, Rate and Audio are configured in the same manner as Normal (Time lapse) see pages 71 and 72.

The only difference is to setup the sensitivity of the audio.

Duration

The duration setting allows the user to choose the Resolution and length of time the unit records for, then the DVR will automatically adjust the rate at which it records to achieve this time period.

-Resolution

First select the resolution required for each camera.

-Video

Next select whether the camera is connected to the DVR.

-Audio

Next select if Audio is being recorded on that channel.

-Days

Finally select the number of days the DVR should record for. The choice being between ; 5,10,20,30,40,50,60,70 80 or 90 Days.

Priority

The RECORD PRIORITY allows the mixing of the various record methods to customise the individual site requirements.

Example: A site may require Alarm recording at night, then a standard FPS recording during the day. In this case the Schedule would be set for required FPS and resolution, and the timetable set for this recording between 8am and 8pm each day. Schedule would be set as 1st Priority. The Alarm settings would be configured as required and this would be set as the 2nd priority.

The Quantum would then record between 8am and 8pm at the Scheduled rate, then once beyond 8pm would look to the second priority and only record Alarm Events.

System

Basic

This section is used to select:
Language
Date format
Video type
System ID
Live viewing resolution
Quality

Client Account

5 separate Client accounts can be set-up with individual user names and passwords.

This is useful for tracking in the log, who has accessed the DVR over the network.

Sensor

Each of the 16 alarm inputs can be configured to be either inactive (NONE), or Normaly Open (N.O), or Normally Closed (N.C).

Auto Delete Mode

In Auto Delete Mode the DVR can be set to delete recordings that are a certain numbers of days old.

This allows the DVR to comply with data protection laws in certain countries such as France.

PTZ Setup for Cameras

-ID

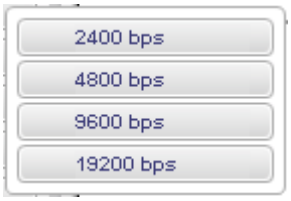
Each camera input can be allocated an RS485 ID between 1 and 255.

-Protocol

Each camera output can have an RS485 protocol associated with it, the choices are:

-Baud Rate

The Baud rate of each PTZ camera can be set the choices are:



PTZ set up for Keyboard

-ID

Each Keyboard can be allocated an RS485 ID between 1 and 255.

Vista VKBD3im addressing switches are inside the keyboard, refer to keyboard manual for setting address.

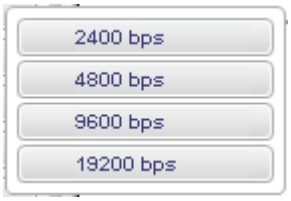
Protocol

Each keyboard can have an RS485 protocol associated with it, the choices are:

Choose Vista-KBD for the VKDB3im keyboard.

-Baud rate

The Baud rate of each PTZ camera can be set the choices are:



Choose 9600 for the VKDB3im

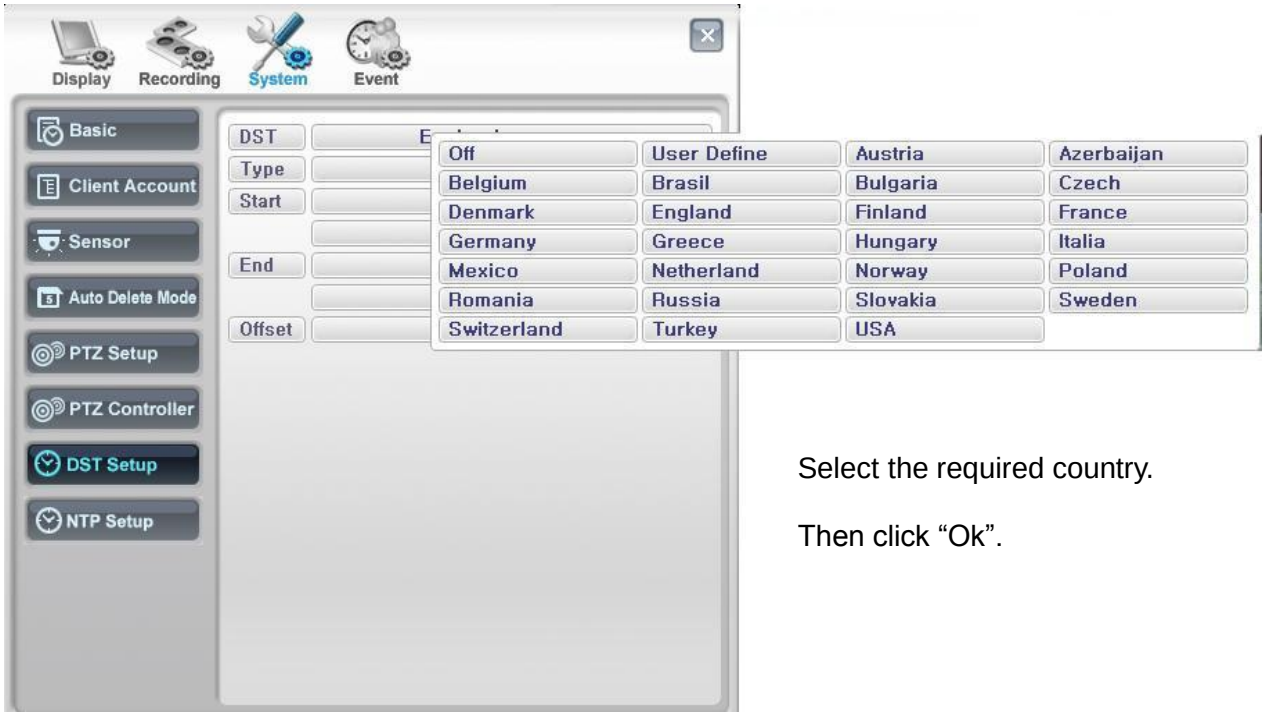
DST Setup

The Quantum can be set to automatically reset its clock when the clocks change for Day Light Saving time. As default this is set to Off.

USER Define

Change “Off” to User Define, this will allow the exact date and time for the change to occur. Alternatively

Select Region



Select the required country.

Then click “Ok”.

NTP Setup

NTP setup allows the DVR to have its internal clock synchronised with an External clock.

The default setting is “Off”

To set up hover on the “Off” a drop down arrow will appear giving the option to turn “On”.

Once “On”, two other options will appear:

Type allows selection between:

Default – Time server is “time.bora.net”.
Domain – Where another time server name can be added.
IP – Where an IP address for a time server can be input.

Select City

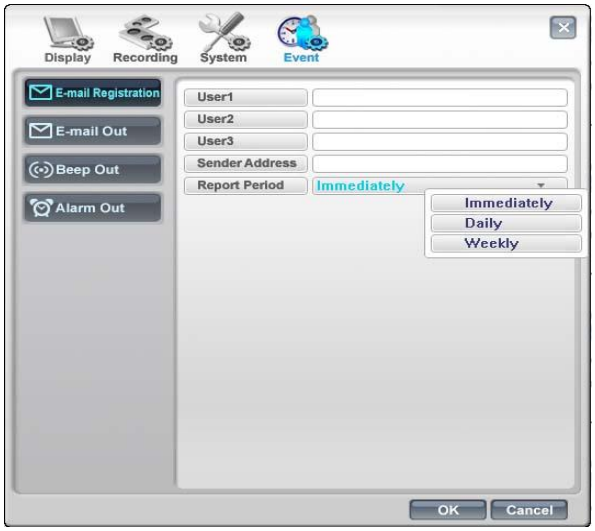
Once the NTP settings have been set, you must then tell the DVR which time zone you are in. This will allow it to offset any time differences if the time server you contact is in a different zone.

Select City, the map screen will appear. Hover over the city selection box, a drop down arrow will appear, click on the arrow. A list of time zones will be displayed. Select the time zone where the Quantum is located.

The Click OK.

EVENT

Email Registration



The Quantum Plus will send E-mails to up to 3 defined addresses under certain conditions such as Alarms or video loss. The screen is where you setup the receiving address and address that the DVR will send from.

The mails can be set to be sent immediately an event occurs, Daily or Weekly.

Email Out

The actions which cause an e-mail response can be defined within this screen.

Beep Out

The internal buzzer can be set to sound on the following occurrences:

Video Loss
Alarm activation
Motion Detection
Power loss

The duration of the buzzer can be set.

Alarm Out

The Alarm output relay can be set to activate on the following occurrences:

Video Loss
Alarm activation
Motion Detection
Power loss

The duration of the relay closure can be set.

Local Search

This allows playback of video which has been downloaded top the PC.

Search

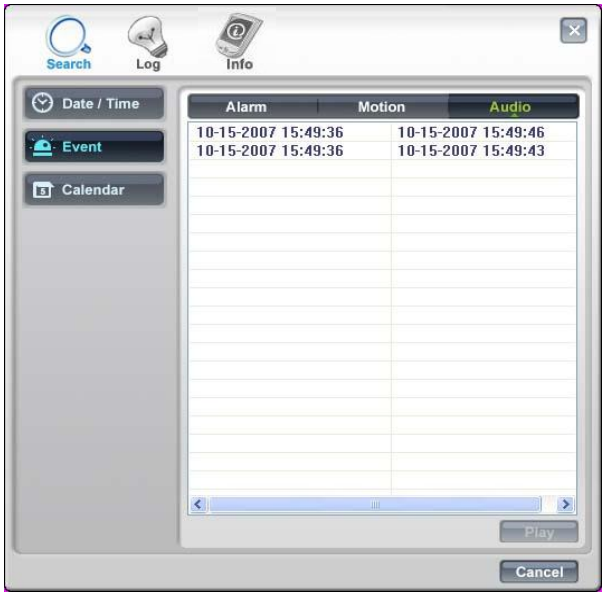
Searches can be done by Date/Time, Even and Calendar.

Date/Time

Hovering over the Date and Time bars will allow drop down boxes to select the required time and Date.

Once set, click Play.

Event



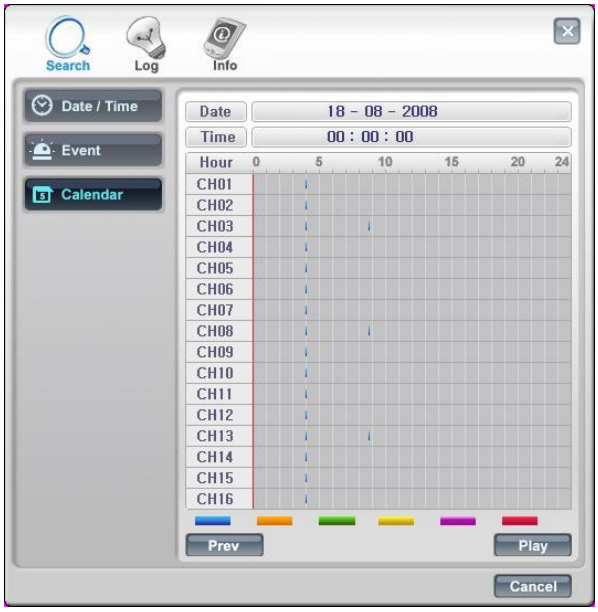
Choose the Event search box then choose the type of Event you are searching for, options are: Alarms, Motion or Audio.

Once the selection is made, a list will appear, choose the Event required and click Play.

Calendar

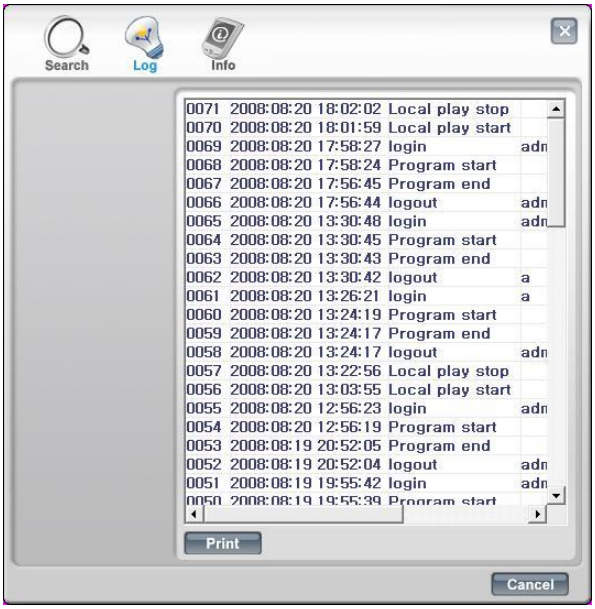
When the Calendar option is chosen this screen will appear, any day with recording available will be highlighted in Blue.

Select the required day.



Any downloaded event s will be shown, click on the event, the red line will move to that event. Then click Play to review the recording.

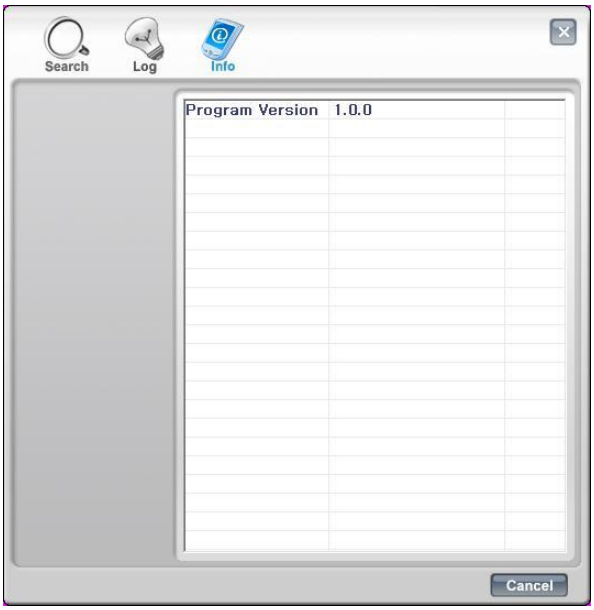
Log



Clicking on Log will display the log file from the unit.

This file can be printed, by clicking Print.

Info

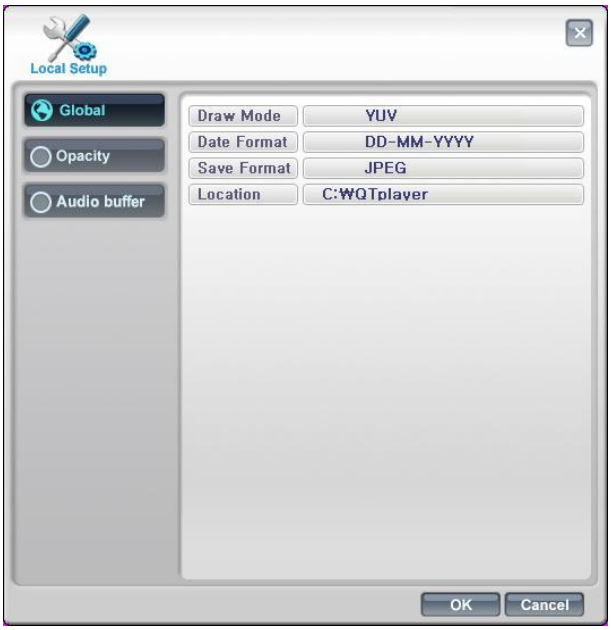


Clicking on Info, will display the version of the software client being used.

Local Setup

This allows the setup of the viewing of the software on the PC.

Global



This screen allows the following:

Draw mode to be set to YUV or RGB

Date Format to be set to: DD/MM/YYY, MM/DD/YYYY or YYYY/MM/DD.

Save Format, for the saving of stills as either JPEG, Bit Map or TIF.

Location for where stills are saved.

Opacity

The opacity or “boldness” of the OSD can be individually set per function. The lower the number the more see through the box.

Audio Buffer

Audio Buffer settings are there to adjust the audio over the network, this will compensate for different network speeds (LANs, WANs etc).

This can only be adjusted if the LIVE video is switched off.

Adjust each variable to achieve best quality video for Network bandwidth available, this is best done through trial and error.

PAN, TILT, Zoom, Focus

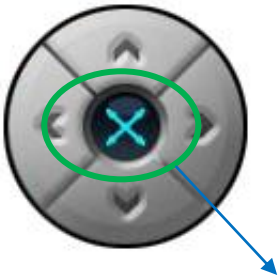
When PTZ button is being pressed, PTZ control icon will be pop-up on the live image.

PAN/TILT/ZOOM/FOCUS

When PAN/TILT button is clicked the Pan/Tilt control appears, this allows Left, Right, Up and Down Control of PTZ cameras

When Zoom/Focus button is clicked, the control changes to Zoom in on the up arrow, Zoom out on the down arrow. Focus near on the left button and focus far on the right arrow.

PRESET/LEARN



PRESET&LEARN icon

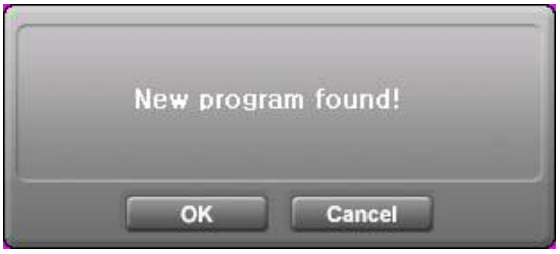
The presets button can be activated by clicking on the centre of the control icon, the preset symbol will appear and the Preset selection box will appear.

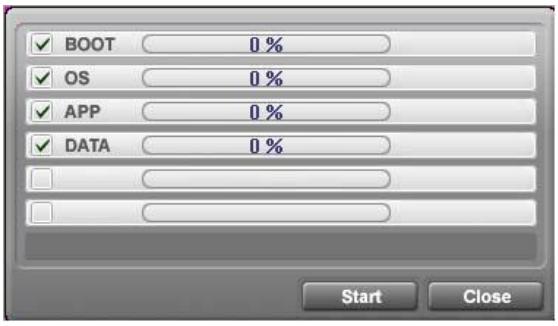
To save a preset, move the camera to the desired position then click “Set” followed by the desired number.

To recall the preset, click “Call” followed by the desired number.

Firmware Upgrade

User can select Firmware Upgrade menu, if a new version of firmaware exits in the C:/QTplayer/Upgrade folder ,then the message 'New program found!' will be displayed if there is no file then 'New program not found!' message will be displayed.





To proceed with upgrading press the OK button and select each firmware files to upgrade it to the system, by ticking the boxes.

Once the upgrade has been completed the following message will appear.

Next press the OK button to reboot the DVR, the firmware will only be applied completely once the system is rebooted.

Quit (Stop Client program)

To exit the Client viewer program click the Quit button.

APPENDIX 1

ALARM SENSOR INSTALLATION

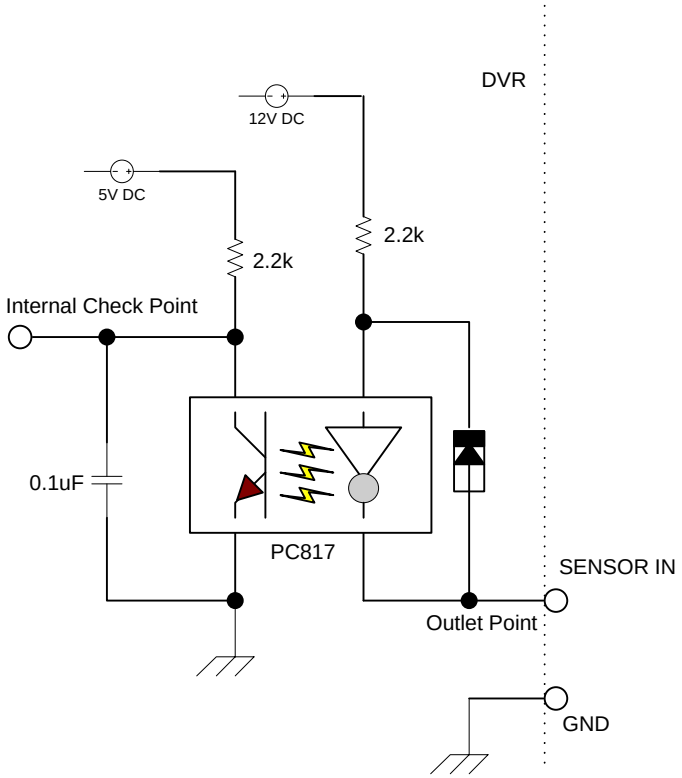
1. Components

1) External Sensor: 1

2) DVR System: 1

2. Inner Circuit for Sensor Input

The inner circuit of Quantum DVR is as follows,



① PC817 : Photo Coupler

② The Specification of PC817

■ Absolute Maximum Ratings

Parameter		Symbol	Rating	Unit
Input	Forward current	IF	50	mA
	*1Peak forward current	I FM	1	A
	Reverse voltage	V R	6	V
	Power dissipation	P	70	mW
Output	Collector-emitter voltage	V CEO	35	V
	Emitter-collector voltage	V ECO	6	V
	Collector current	IC	50	mA
	Collector power dissipation	P C	150	mW
Total power dissipation		P tot	200	mW
*2Isolation voltage		V iso	5 000	V rms
Operating temperature		T opr	-30 to + 100	°C
Storage temperature		T stg	-55 to + 125	°C
*3Soldering temperature		T sol	260	°C

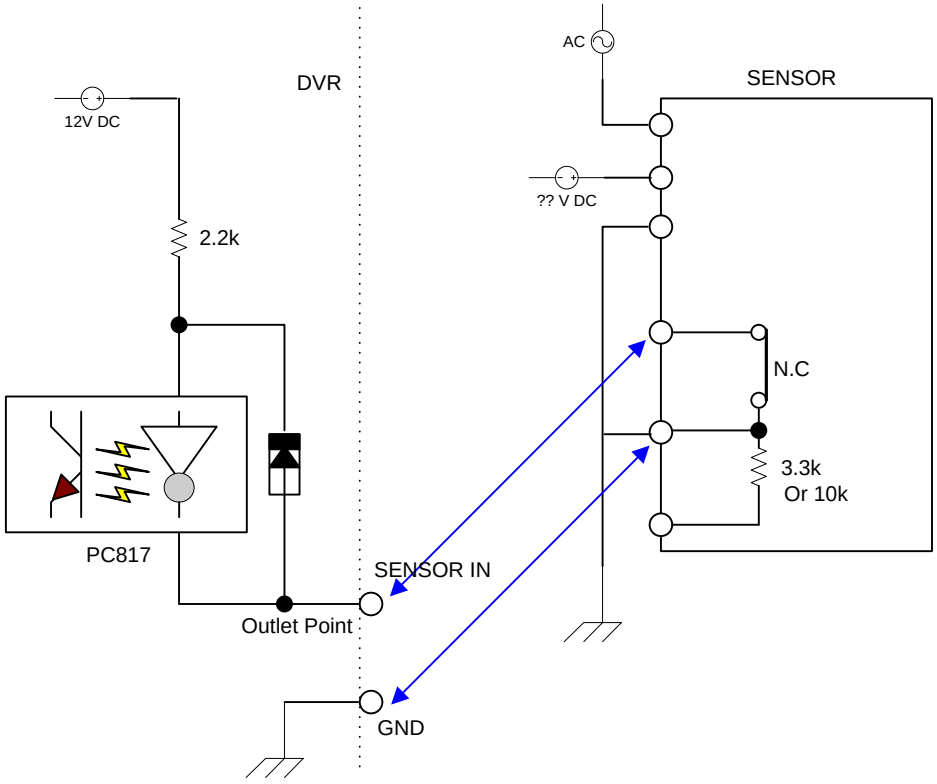
*1 Pulse width<=100□ s, Duty ratio: 0.001
*2 40 to 60% RH, AC for 1 minute
*3 For 10 seconds

■ Electro-optical Characteristics

Parameter			Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Input	Forward voltage		V F	IF = 20mA	-	1.2	1.4	V
	Peak forward voltage		V FM	IFM = 0.5A	-	-	3.0	V
	Reverse current		IR	V R =4V	-	-	10	μ A
	Terminal capacitance		Ct	V = 0, f = 1kHz	-	30	250	pF
Output	Collector dark current		ICEO	V CE = 20V	-	-	10 -7	A
Transfer charac-teristics	*4Current transfer ratio		CTR	IF = 5mA, V CE = 5V	50	-	600	%
	Collector-emitter saturation voltage		V CE(sat)	IF = 20mA, I C = 1mA	-	0.1	0.2	V
	Isolation resistance		R ISO	DC500V, 40 to 60% RH	5 x 1010	1011	-	Ω
	Floating capacitance		Cf	V = 0, f = 1MHz	-	0.6	1.0	pF
	Cut-off frequency		fc	V CE = 5V, I C = 2mA, R L = 100 W, -3dB	-	80	-	kHz
	Response time	Rise time	t r	V CE = 2V, I C = 2mA, R L = 100 Ω	-	4	18	μ s
		Fall time	tf		-	3	18	μ s

1. SENSOR Install Processing

① Please refer the below block diagram.

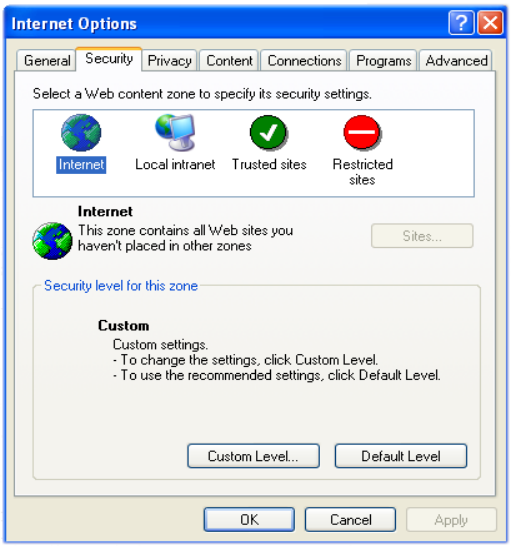


APPENDIX 2

SETTING INTERNET SECURITY SETUP FOR WEB CLIENT ON WINDOW XP/2000 & WINDOW VISTA SERVICE PACK 2.

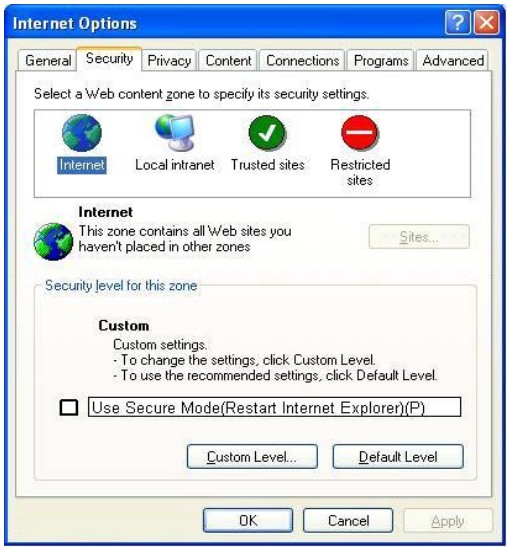
1) Security Setup

> Window XP / 2000



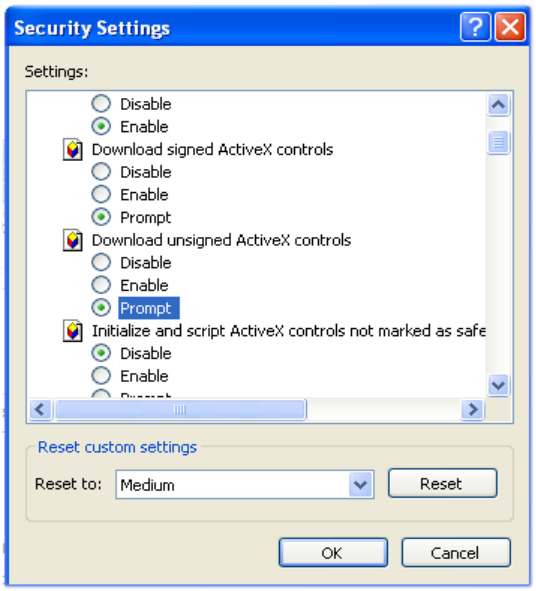
Tools-> Internet Options-> Security -> Select “Customer Level”

> Window Vista

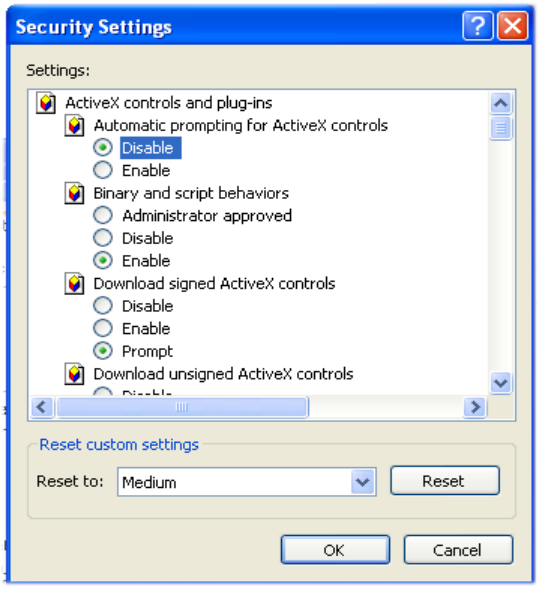


Tools-> Internet Options-> Security -> Unselect square box -> Select “Customer Level”

Select “ Allow script-initiated windows Without Size or position constraints”-> Enable.

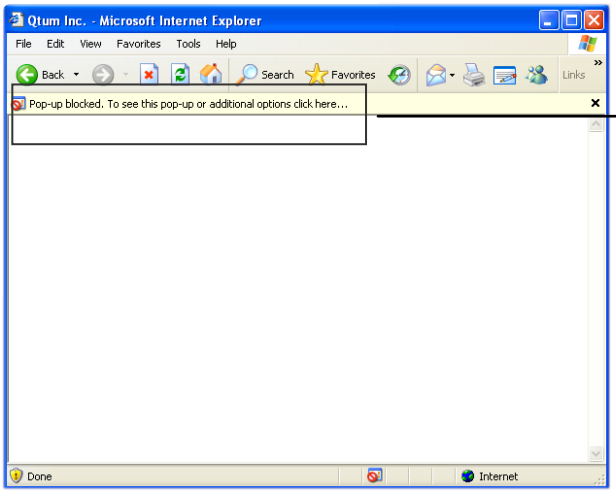


Select “Download unsigned Active X Controls”-> Prompt

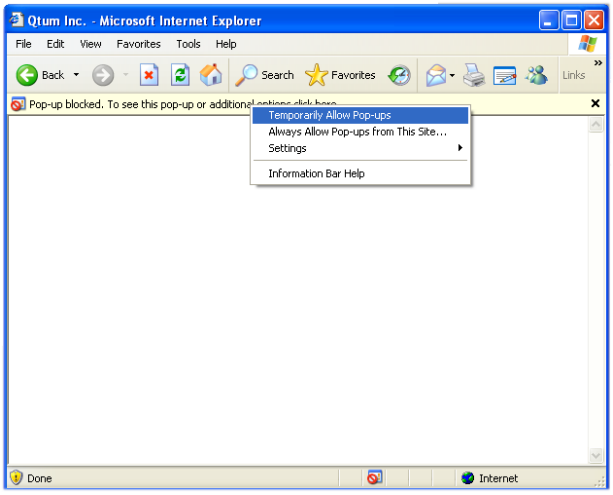


Select “ Automatic Prompting for Active X Controls”-> Disable

2) Connection


Qtum Inc. - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Links
Pop-up blocked. To see this pop-up or additional options click here...
Done
Internet

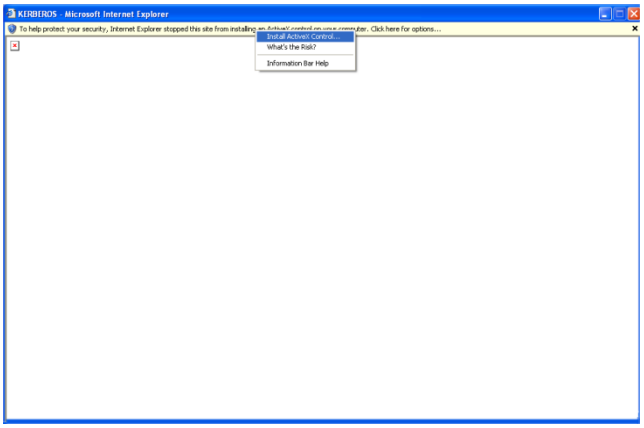
Click here as described


Qtum Inc. - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Links
Pop-up blocked. To see this pop-up or additional options click here...
Temporarily Allow Pop-ups
Always Allow Pop-ups from This Site...
Settings
Information Bar Help
Done
Internet

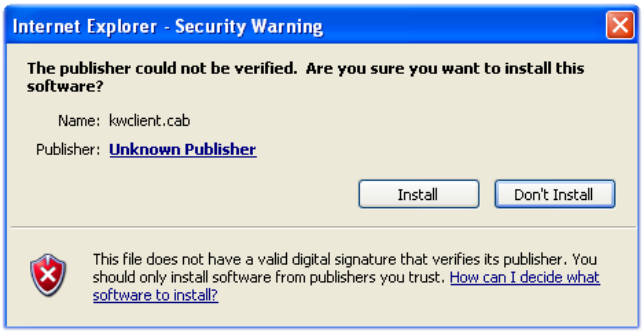
Select “Temporary Allow Pop-ups”

KERBEROS - Microsoft Internet Explorer
To help protect your security, Internet Explorer stopped this site from installing an ActiveX control on your computer. Click here for options...

Click “To help protect security, Internet Explorer stopped this site from installing an Active X control on your computer. Click here for options…”


KERBEROS - Microsoft Internet Explorer
To help protect your security, Internet Explorer stopped this site from installing an ActiveX control on your computer. Click here for options...
Install ActiveX Control...
What's the Risk?
Information Bar Help

Select “Install Active X Control “


Internet Explorer - Security Warning
The publisher could not be verified. Are you sure you want to install this software?
Name: kwclient.cab
Publisher: Unknown Publisher
Install
Don't Install
This file does not have a valid digital signature that verifies its publisher. You should only install software from publishers you trust. How can I decide what software to install?

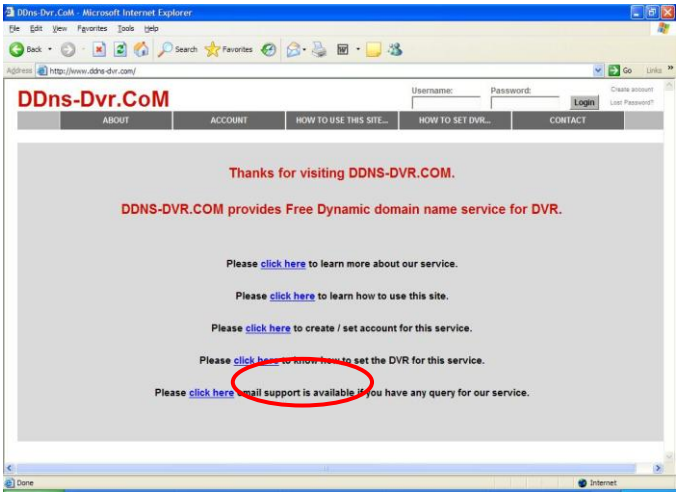
Select “Install” and then ‘Log-In’ box will be shown.

APPENDIX 3

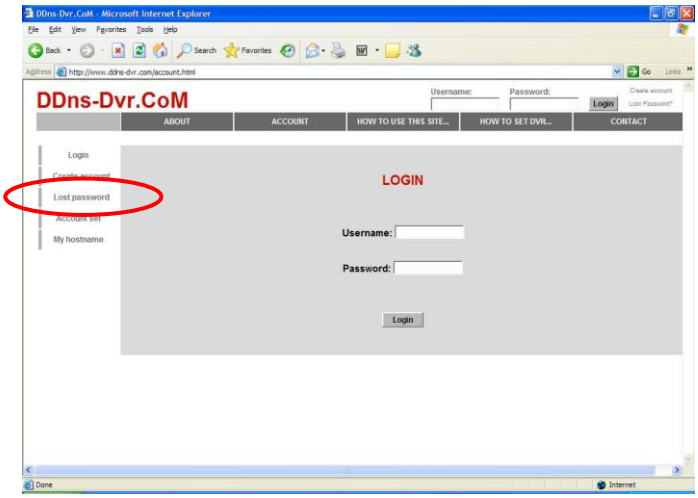
DYNAMIC IP (Supporting DDNS Server)

With DDNS Server, This allows a user to connect to the unit remotely without the need for a fixed IP address.(Please register your ID & Domain at www.ddns-dvr.com in which you can use their DDNS server as free of charge)

1. Visit www.ddns-dvr.com to get the DDNS user ID & PW as well as Host name.

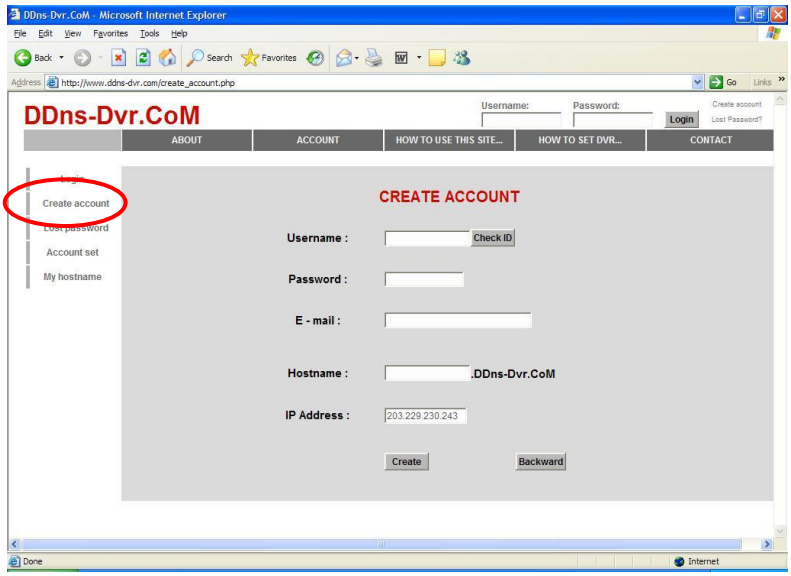

DDns-Dvr.CoM - Microsoft Internet Explorer
DDns-Dvr.CoM
Username:
Password:
Login
ABOUT
ACCOUNT
HOW TO USE THIS SITE...
HOW TO SET DVR...
CONTACT
Thanks for visiting DDNS-DVR.COM.
DDNS-DVR.COM provides Free Dynamic domain name service for DVR.
Please click here to learn more about our service.
Please click here to learn how to use this site.
Please click here to create / set account for this service.
Please click here to know how to set the DVR for this service.
Please click here email support is available if you have any query for our service.

2. Click to create / set account of “Dynamic DNS”.



3. Select “Create Account” menu.

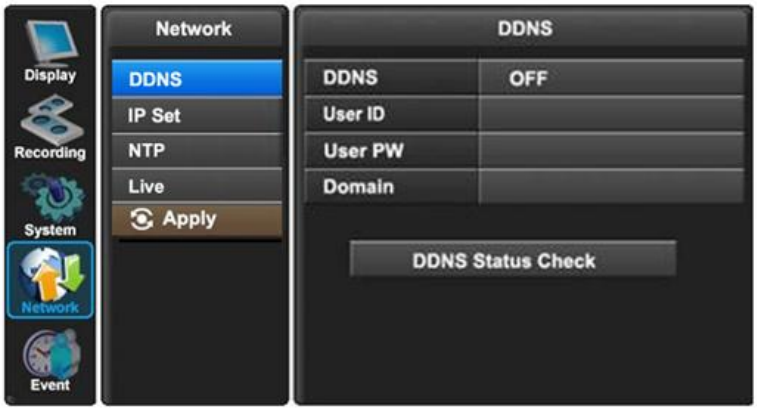
4. Create Account.



> Fill in all blanks in order to create new account.
ID & Password will be emailed to you when the account is setup correctly.

Once the DDns-Dvr account has been setup, it is necessary to add the details in the Network section of the Quantum's menus.

DDNS SET



To enter Network set menu, system ask password (Default is 00000000).

In DDNS environment, need to be changed DVR & Web server port, please refer to IP set.

Set up DDNS

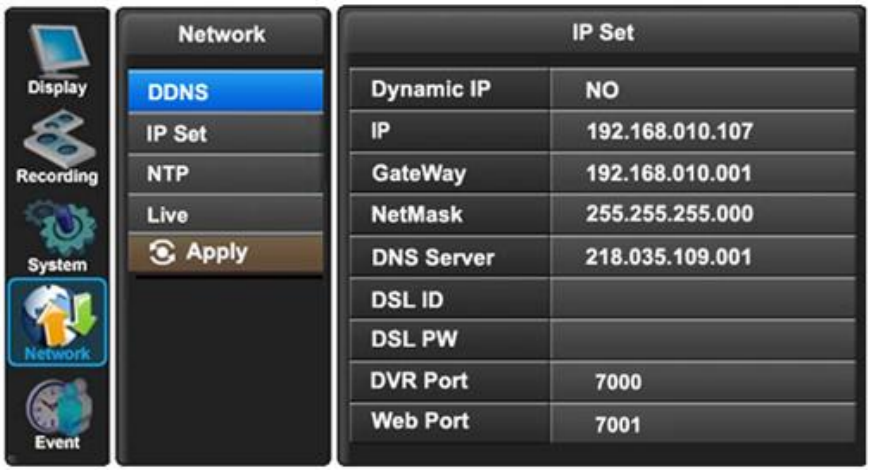
1. Change DDNS to ON
2. Input User ID
3. Input User PW
4. Input Domain
5. Click “DDNS Status Check” if it is “ok” Click “Apply”

> Note; In DDNS Setup, The Domain Name has to be filled in.

Appendix 4

SETUP FOR DVR PORT/ WEB SERVER PORT USING IP SHARING ROUTER

(Port Forwarding)



1) To use IP sharing Router, “Use Dynamic IP” should be set to “NO”.

- DVR Port: This can be set to any number between 2000 to 65535.
- Web Server Port: this can be set to any number between 2000~65535, as long as it is not the same as the DVR Port number

2) Setup “virtual server” on IP sharing Router

It is for setting virtual server to forward IP which is allotted to DVR.

> For example,

DVR-1, IP : 192.168.10.107, DVR Port : 7000, Web Server Port : 7001

If DVR-1 is configured as above, the virtual server on IP sharing router is as follows.

1) PC Server Name : DVR-1(IP 192.168.10.107)

Protocol : TCP, Internal Port : 7000, External Port : 7000

2) PC Server Name : DVR-1 (IP 192.168.10.107)

Protocol : TCP, Internal Port : 7001, External Port : 7001

* For more detail, please refer to relevant IP sharing manual.

(3) ‘DDNS’ Setup on IP sharing router

DDNS configuration is not needed in case of fixed IP.

(4) To connect DVR-1 with Internet Explorer, http://dvr-1.ddns-dvr.com:7001,
to connect DVR-1 with CD installer, http://dvr-1.ddns-dvr.com:7000.

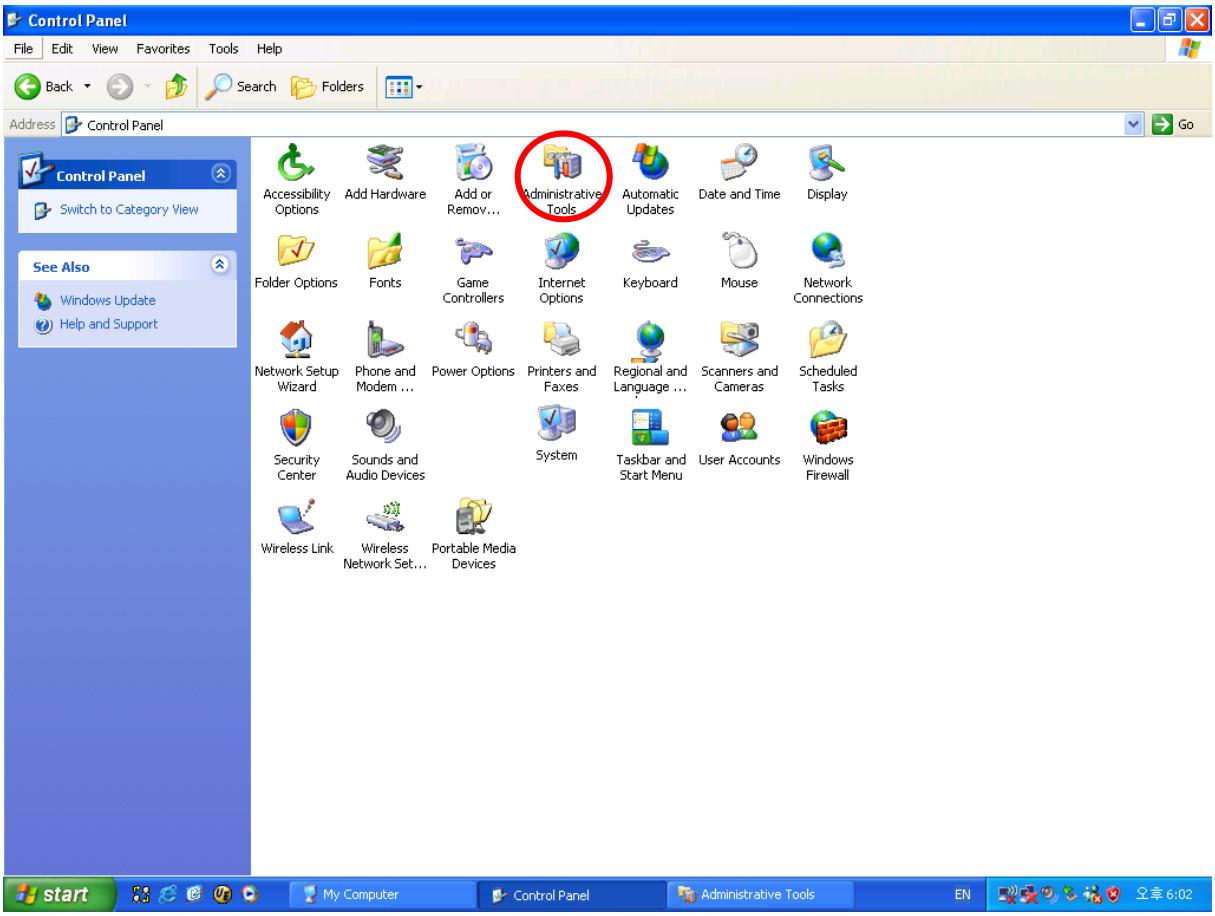
APPENDIX 5

MAKING A PARTITION ON AN EXTERNAL USB HARD DRIVE

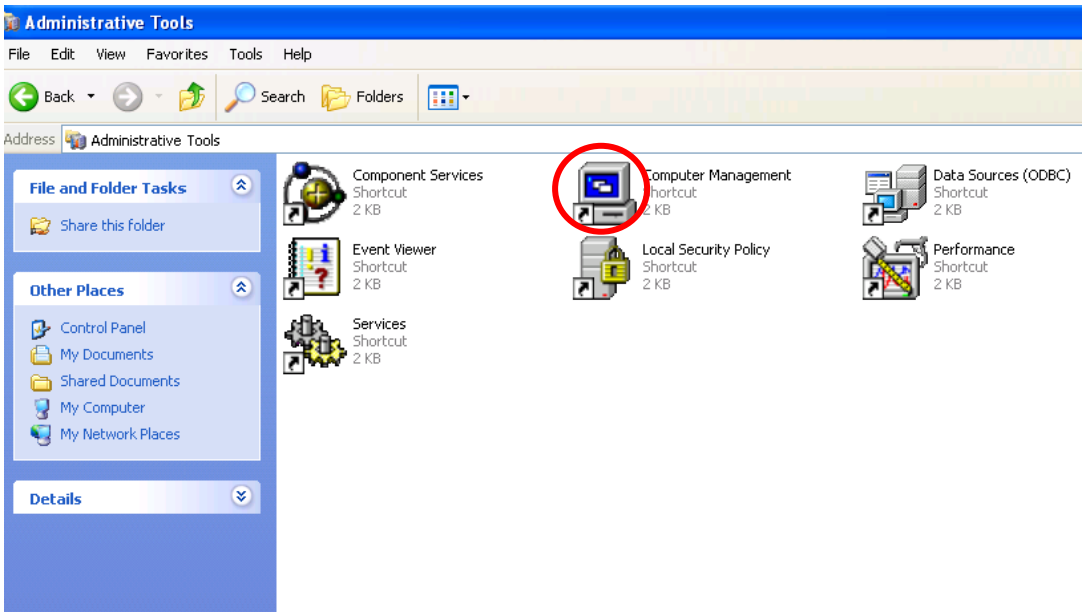
To back up to USB HDD, the USB HDD should be formatted first on PC. The Quantum PLUS supports the FAT32 & NTFS file system, of which maximum size is 500GB for one partition. Please refer to the following procedure to make a partition and format on PC.

*If the HDD capacity is under 500GB, you don't need to make a partition and simply connect to the DVR directly.

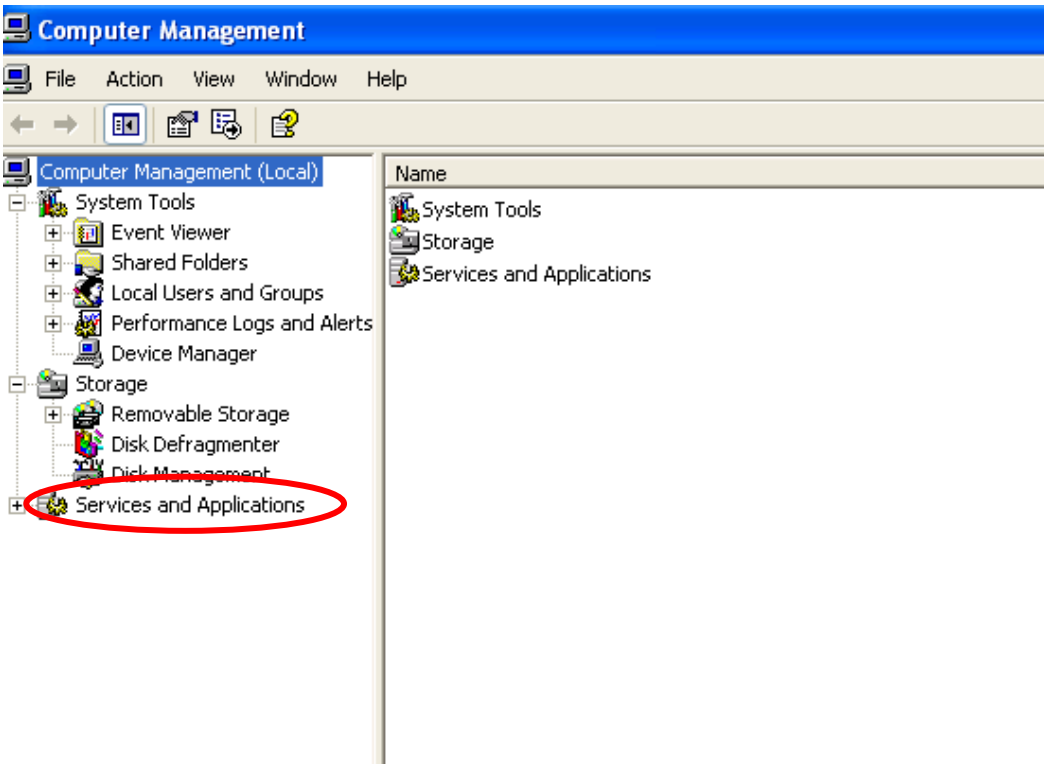
1. Select Control panel-> administrative Tools.



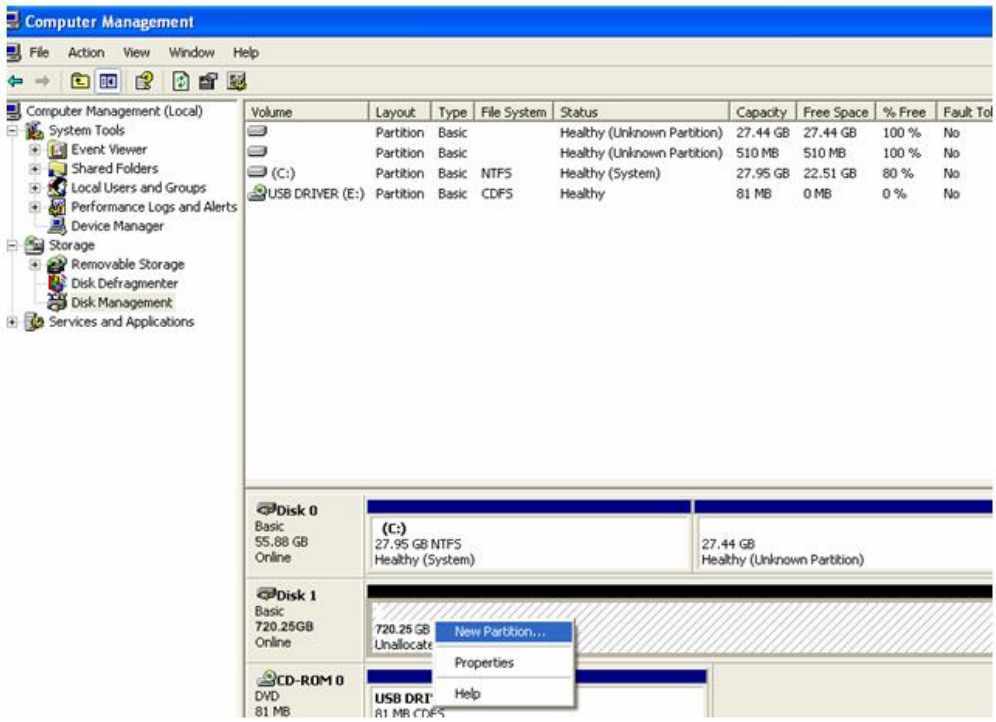
2. Select “Computer Management”



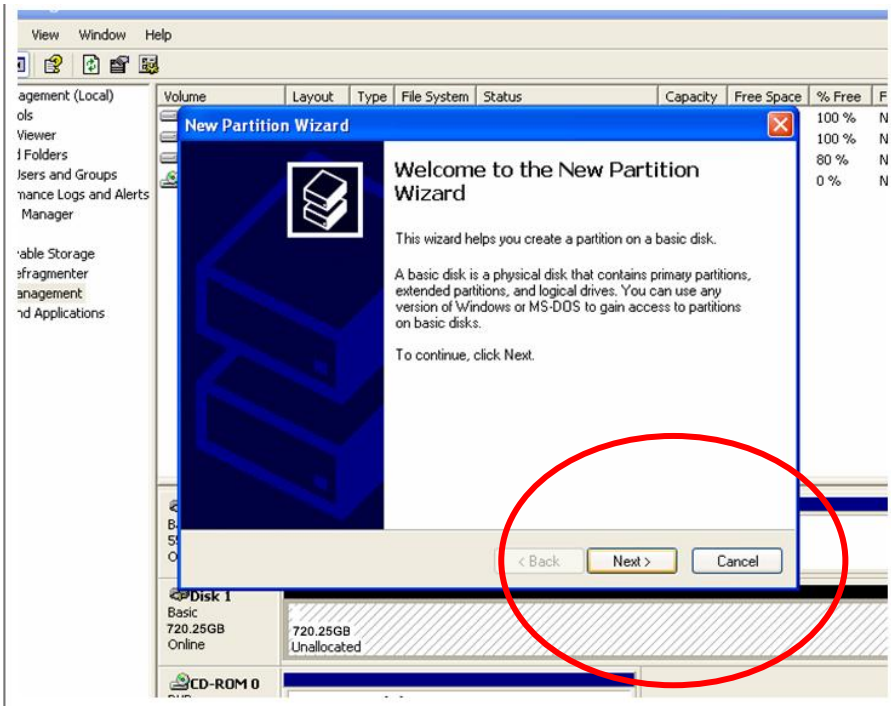
3. Select “Disk Management”.



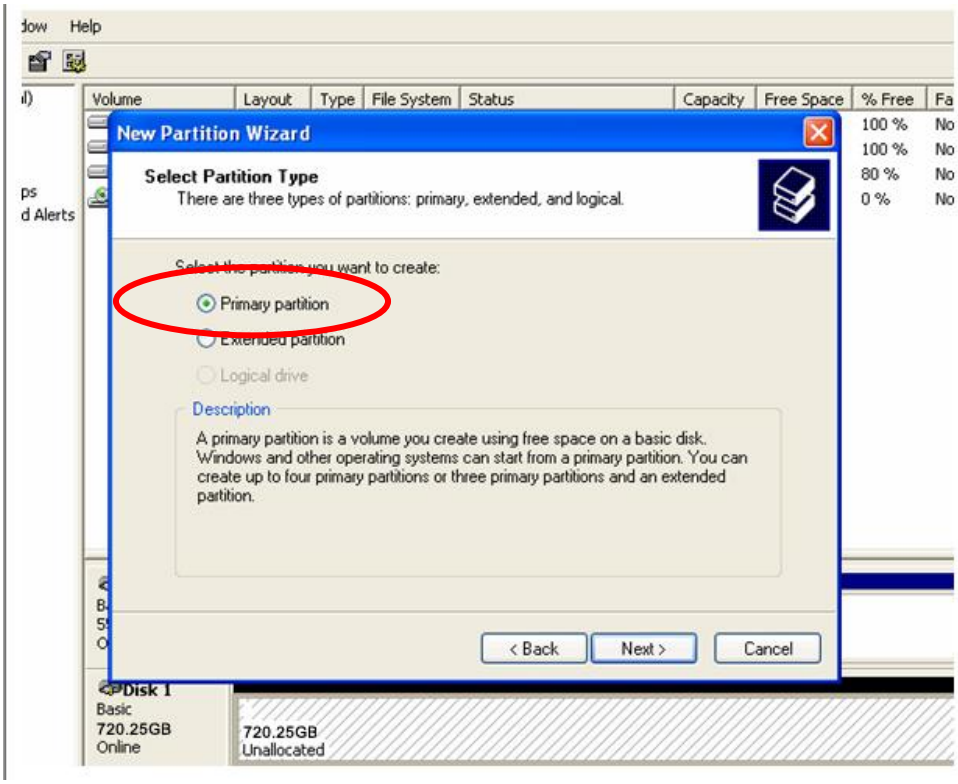
4. Click right mouse button and select “New Partition”.



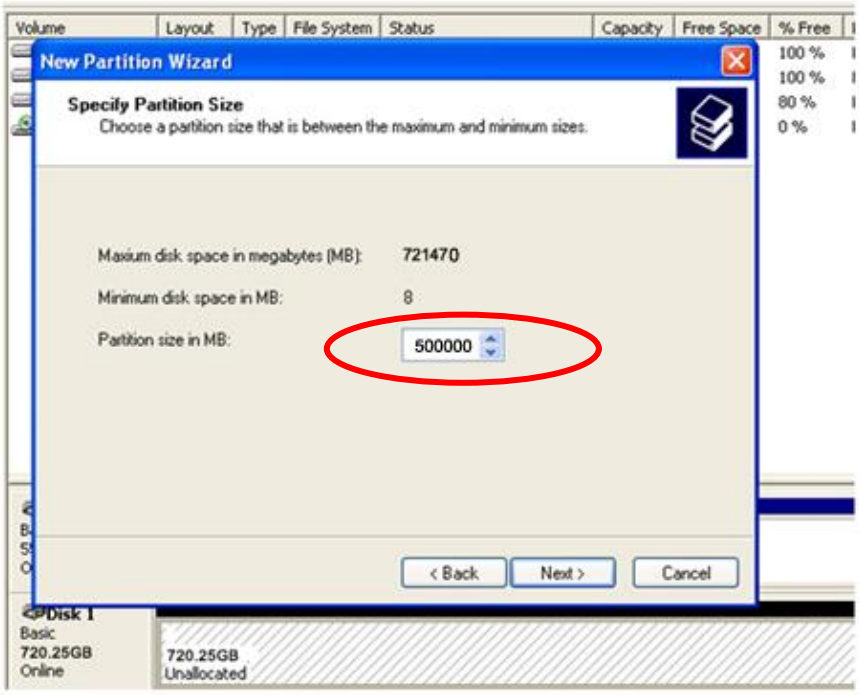
5. Follow “New Partition Wizard” procedure as below.


View Window Help
Volume Layout Type File System Status Capacity Free Space % Free
100 %
100 %
80 %
0 %
New Partition Wizard
Welcome to the New Partition Wizard
This wizard helps you create a partition on a basic disk.
A basic disk is a physical disk that contains primary partitions, extended partitions, and logical drives. You can use any version of Windows or MS-DOS to gain access to partitions on basic disks.
To continue, click Next.
< Back
Next >
Cancel
Disk 1
Basic
720.25GB
Online
720.25GB
Unallocated
CD-ROM 0

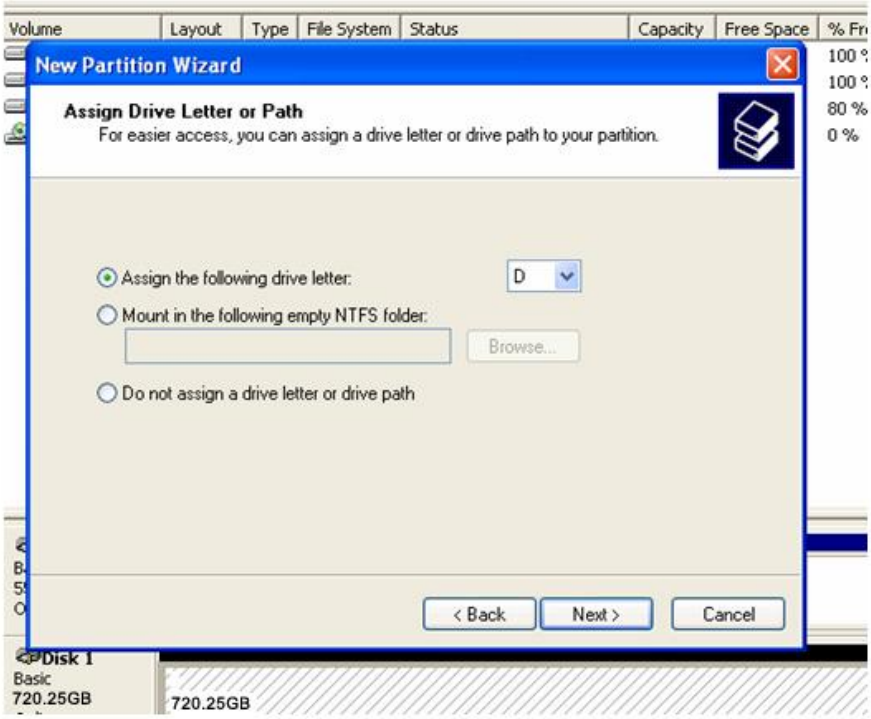
6. Select the Primary partition option.


New Partition Wizard
Select Partition Type
There are three types of partitions: primary, extended, and logical.
Select the partition you want to create:
Primary partition
Extended partition
Logical drive
Description
A primary partition is a volume you create using free space on a basic disk. Windows and other operating systems can start from a primary partition. You can create up to four primary partitions or three primary partitions and an extended partition.
< Back
Next >
Cancel
Disk 1
Basic
720.25GB
Online
720.25GB
Unallocated

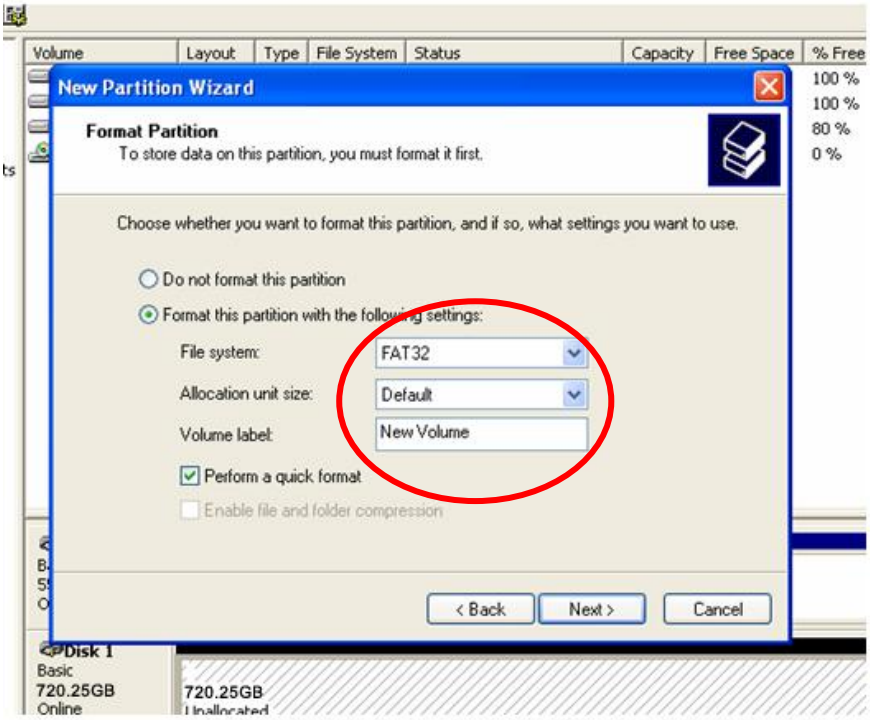
7. Maximum is 500GB at FAT32 file format.



8. Assign drive letter

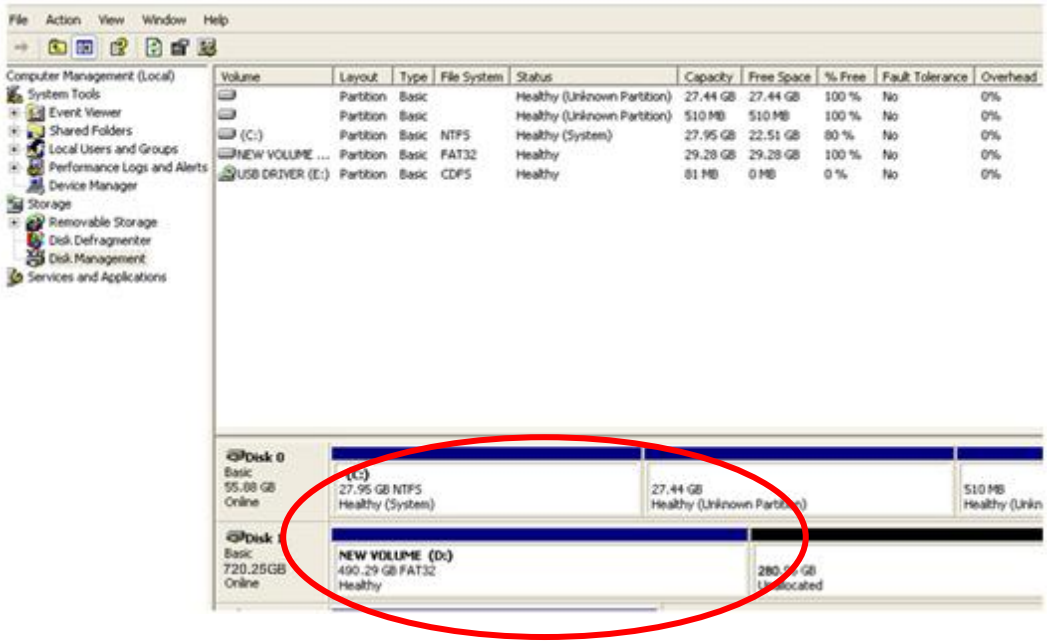


9. Format the partition to FAT32

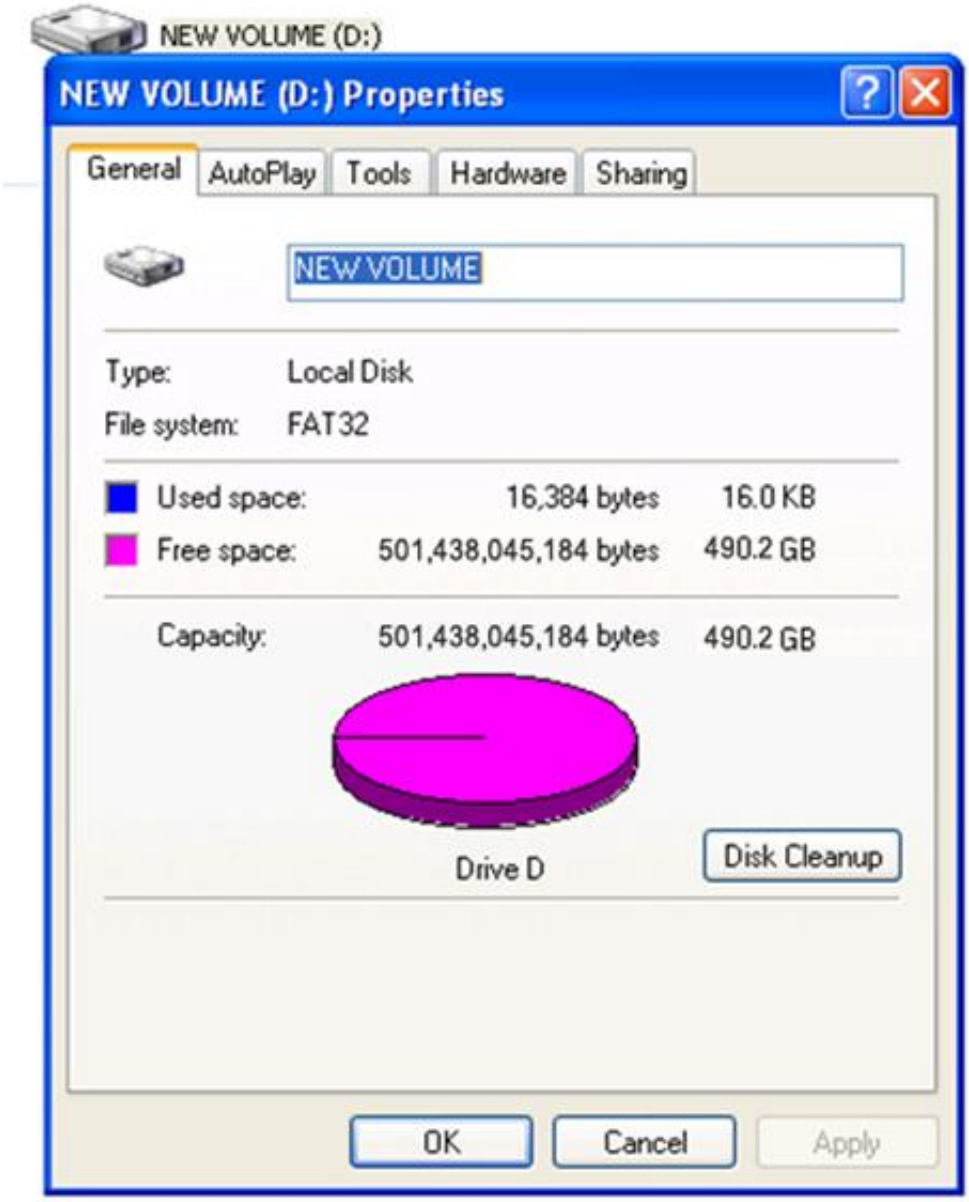


10. At this stage, New Partition has been made.

11.Check New partition was created correctly.(Format will run automatically)



12. Check New Partition was created correctly



APPENDIX 6

SPECIFICATION

Model				QuantumPLUS Mpeg4 DVR		
				4CH DVR	8CH DVR	16CH DVR
Video	Camera Input(NTSC,PAL)			4	8	16
	Output			1 BNC, 1 S-Video, 1 VGA, 1 SPOT		
	Loop			4	8	16
Audio	Audio Input			4RCA	8RCA	16RCA
	Output			1 RCA		
Sensor in (No,Nc)/ Alarm Out				4/1	8/1	16/1
Operating System				Embeded Linux OS		
Display	Speed			120/100fps	240/200fps	480/400fps
	Resolution(Pixel)			720x480(NTSC) / 720x576(PAL)		
	Split Screen			1,4	1,4,8	1,4,8,16
Recording	Compression			MPEG-4		
	Resolution(Pixel)			720x480, 720x240, 360x240(NTSC) / 720x576, 720x288, 360x288(PAL)		
	Picture Quality			3 Steps (High, Middle, Low)		
	Mode			Normal, Motion, Alarm, Schedule, Audio, Time Lapse		
	Priority			Alarm -> Motion -> Schedule -> Time Lapse -> Normal		
	Speed	Total	NTSC	120fps(720x480),120(720x240), 120(360x240)	120fps(720x480),240(720x240), 240(360x240)	120fps(720x480),240(720x240), 480(360x240)
			PAL	100fps(720x576),100(720x288), 100(360x288)	100fps(720x576),200(720x288), 200(360x288)	100fps(720x576),200(720x288), 400(360x288)
		Each Chanel	NTSC	30fps(720x480),30(720x240), 30fps(360x240)	15fps(720x480),30(720x240), 30fps(360x240)	7fps(720x576),15(720x240), 30fps(360x240)
			PAL	25fps(720x576),25(720x288), 25(360x288)	12.5fps(720x576),25(720x288), 25(360x288)	6fps(720x576),12.5(720x288), 25fps(360x288)
	Water Marking&Scrambling			Our Own Algorithm		
Playback	Display			1,4	1,4,8	1,4,8,16
	Search Mode			Date & Time, Calendar, Event(Alarm, Motion, Audio)		
	Speed			Normal, REW & FF(Recorded Speed x2, x4, x16), Frame to Frame, Pause		
	Device			Internal HDD		
	Still Image Capture & Save			JPEG, BMP Compression or Exclusive Format & USB I/F Device(Memory Stick)		
Network	Network Interface			Ethernet		
	Network Transmission			Individual network transmission regardless of system recording		
	Protocol			TCP/IP, SMTP, HTTP, DHCP, PPPOE(ADSL)		
	Serial Communicaton			RS-232 1Each, RS-485 2EA (PTZ&Keyboard Control)		
	Application			Windows 2000 / XP(PC Client System) / Windows Vista		
	Web Browser			Internet Explorer 5.0 Higher(DVRs Contorl or Viewing)		
	Event Transport			E-mail notification when event Occurs		
	Viewing			Remote client, CMS, Mobile Phone		
Back Up	Interface			USB 2.0x2EA		
	Backup Device			Internal CD/DVD-RW, External HDD, CD/DVD-RW, Storage, Network, Memory Stick		
Control	Motion Detection			Each Control / Channel		
				Sensitivity : 3 Steps for each channel		
				Area : Programmable motion detection area for each camera individually		
	Alarm Hold Time			5~240 SEC		
	Event Log			Up to 256 events(Alarm,Motion,Video&Power Loss,Power&Record On/Off)		
	Remote Controller			IR Remote Control		
	Pan/Tilt Camera			Control From RS485 Interface		
Others	HDD			Supports Max. x 4HDDs up to 3TB		
	Power Source			100~240V AC, 50~60HZ		
	Power Consumption			90W		
	Operating Temperature			5~40°C(41~104F)		
	Relative Humidity			Maxium 80% Non-Considering		
	Weight		Net	9Kg		
			Gross(Box)	10Kg		
	Dimension		Net	450(W)*370(D)*90(H)mm		
			Gross(Box)	560(W)*440(D)*220(H)mm		

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